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THE LOST ART OF THE BARGAINING CHIP?

THE CASE FOR GAINING NEGOTIATING
LEVERAGE FOR NUCLEAR ARMS CONTROL
WITH RUSSIA AND CHINA

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Executive Summary

In the coming decade, the United States will need to come to grips with the unprecedented challenge of facing an authoritarian axis of two peer nuclear rivals that are actively teaming up to undermine its global and regional interests. It faces this challenge with a nuclear force posture—present and planned—designed for a far more benign post-Cold War global threat environment.

The first introductory chapter notes that for more than a decade, Washington has tried to hold the line by seeking to negotiate arms control arrangements with Russia and China that would avoid a new nuclear arms race. Washington's calls for nuclear arms control, however, have fallen on deaf ears in Moscow and Beijing. Each has continued to expand its nuclear arsenal, even as the United States has exercised restraint by pursuing mostly in-kind nuclear modernization at current force levels. As China and Russia continue to arms race around and away from arms control, the United States continues to hope they will reconsider and come to the nuclear negotiating table.

The second chapter of this report explores the disconnects between Washington's arms control aspirations and the outcomes it has experienced for over a decade. It suggests continuing to do the same thing and hoping for better results is wishful thinking that avoids difficult, necessary choices. Washington either needs to give up on arms control as it seeks alternative responses in this new nuclear landscape, or it needs to change its approach to arms control to better fit the reality of simultaneous strategic competition with two nuclear superpowers. Nuclear rivals cannot be expected to negotiate seriously unless arms control serves their own interests. Even if they can be cajoled to the negotiating table, they are likely to take obdurate stances if they believe they are bargaining from a position of enduring strength (Russia) or temporary weakness (China). These realities of nuclear bargaining are akin to the dynamics of competitive contractual negotiations in other spheres.

The third chapter draws on the Cold War experience for insights into what has worked in competitive nuclear negotiations between superpower rivals. It explores the so-called dual-track approach, which involves limited arms racing to narrow gaps and to gain negotiating leverage that would incentivize rivals to engage seriously in an arms control process.

Although assessing causality is complicated, this approach seems to have played an important role in producing successful arms control outcomes in cases like the Anti-Ballistic Missile (ABM) Treaty, the Intermediate-Range Nuclear Forces (INF) Treaty, and the Strategic Arms Reduction Treaty (START). The chapter then extrapolates the lessons of these Cold War successes to today's tripolar nuclear context. It finds that, as things stand, neither China nor Russia have good reasons to negotiate limits on a nuclear arms race with the United States when they are the only ones doing the arms racing. The analysis concludes that if Washington wants arms control, it should pivot to a deliberate dual-track strategy to shake up those countries' cost-benefit calculations.

The fourth chapter explores what an effective dual-track arms control strategy would entail in today's competitive two-peer nuclear milieu. The paramount goal of both the arms racing and the arms control elements of this approach would be to achieve strategic stability through a rough three-way nuclear balance. The interlinking elements of a successful dual-track strategy in pursuit of this goal are: (a) building and sustaining domestic political support, (b) gaining negotiating leverage, and (c) tailoring an ambitious arms control initiative that aligns with these levers.

The first element is to build domestic political support. No policy works without this, and the counterintuitive notion of arms racing toward arms control would be a tough sell across the ideological spectrum. Domestic support requires laying out a clear, understandable strategy of ends, ways, and means that explains the value of the goal: to enhance stable three-way mutual deterrence. In this context, it would be critical to stress that the purpose of arms racing is not to seek nuclear dominance but rather to prevent the United States from falling too far behind. It would also be important to prioritize cost-effective ways to gain leverage. Furthermore, this strategy of limited arms racing intended to gain leverage for arms control should be presented as a middle way between the dovish impulse to accept nuclear disadvantage to avoid an arms race and the hawkish impulse to arms race to seek a decisive nuclear edge.

The second element the chapter recommends is a set of steps toward gaining negotiating leverage by narrowing gaps. These steps include a limited nuclear buildup by:

- increasing by a very small amount (25–50) the number of nuclear weapons deployed on existing strategic missiles when the New START treaty expires in February 2026 to signal a dual-track pivot, account for uncertainty about the current size of the Russian and Chinese strategic arsenals, and offset sizeable U.S. disadvantages in substrategic nuclear forces;
- exploring the cost and feasibility of developing a new heavy intercontinental ballistic missile (ICBM) and nuclear-armed maneuverable hypersonic vehicles (MHVs) to partially offset an array of exotic new Russian strategic delivery systems; and

- continuing development of a new nuclear-armed sea-launched cruise missile (SLCM-N), deploying conventional medium-range ground-launched missiles to Asia and expanding deployments to Europe beyond those planned for Germany, and exploring the feasibility (including cost and timeline) of rearming some Tomahawk cruise missiles with nuclear weapons to close near-term regional deployment gaps until SLCM-N is deployed.

This limited nuclear expansion program would be supplemented by a robust package of contingency-only hedging preparations to demonstrate that the U.S. is ready to respond if Russia makes a bid for strategic breakout or if China approaches parity without slowing its breakneck nuclear buildup. Finally, Washington should privately point out to Moscow and Beijing that an uncontrolled nuclear arms race risks eroding the confidence of America's allies in the credibility of the U.S. nuclear umbrella and thus could lead some of those allies to consider getting their own nuclear weapons, which would be contrary to Russian or Chinese strategic interests.

The above sources of leverage should be pursued in conjunction with the third element, the launch of an ambitious arms control initiative for a verifiable trilateral treaty that would set equal limits on total deployed and quickly deployable nuclear weapons at or below current U.S. levels. The proposed treaty should also include bans or low sublimits on certain new or destabilizing nuclear delivery systems including intercontinental-range and nuclear-armed MHVs, fractional orbital bombardment systems (FOBS), long-range nuclear-armed autonomous nuclear-powered torpedoes, nuclear-powered cruise missiles, ultra-heavy ICBMs, mobile ICBMs, and land-based intermediate-range nuclear-armed ballistic and cruise missiles. Washington should also propose the immediate negotiation of a stand-alone interim agreement to freeze further development, testing, and deployment of the most potentially destabilizing of these nuclear delivery technologies: intercontinental-range and/or nuclear-armed MHVs and FOBS. These interim freezes should remain in place until permanent bans or strict limits can be negotiated.

The study concludes by calling for greater strategic clarity about the role of and prospects for nuclear arms control. Wishful thinking must give way to a sober assessment of the realistic options for dealing with the untethered nuclear competition that is gathering steam in plain sight. The realistic choices for the United States are finite. It can accept relative nuclear weakness to avoid a costly arms race, with a clear-eyed understanding that arms control would not remedy this disadvantage. At the other extreme, it can pursue nuclear superiority, with full knowledge that this would all but rule out any prospect of reaching cooperative arms control arrangements. Finally, it can seek a middle path by pivoting to a more hard-nosed brand of arms control in pursuit of a three-way nuclear balance. Debating and deciding on one of these strategic paths forward should be an urgent priority for the new Congress and the new Trump administration.

CHAPTER 1

Introduction

The American public is belatedly waking up to the unwelcome reality that, like it or not, the United States is now engaged in a generational strategic rivalry with China and Russia and that nuclear competition is playing a growing role in this high-stakes contest to shape the nascent post-post-Cold War world order.¹ Raising the stakes even higher is the deepening alignment between these two authoritarian powers, which are increasingly working together against the vital interests of the United States and its closest allies. As one leading Russia expert has warned, “Never in its entire history has [Russia] been so entwined with China.”²

Nuclear aspects of the return of great power competition are particularly ominous for the United States. Unlike Washington, both Moscow and Beijing have been pursuing sustained nuclear buildups for well over a decade.³ Russia now boasts a clear numeric edge and is developing several daunting new nuclear delivery systems. Beijing is also fielding a formidable array of modern systems and appears to be sprinting toward rough numeric parity in deployed forces over the next decade. Neither country has stated the end goal of their nuclear ambitions, but a worst-case scenario no longer seems far-fetched: that they could individually achieve a clear nuclear edge and together wield commanding nuclear dominance.⁴ This scenario is accompanied by growing recognition that the United States faces an

1 As of this writing, current journalistic bestsellers include Jim Scuttio, *The Return of Great Powers: Russia, China, and the Next World War* (New York: Dutton, 2024); David Sanger, *The New Cold Wars: China’s Rise, Russia’s Invasion, and America’s Struggle to Defend the West* (New York: Crown Publishing, 2024); and Annie Jacobsen, *Nuclear War: A Scenario* (New York: Dutton, 2024).

2 Aleander Gabuev, “The West Doesn’t Understand How Much Russia Has Changed,” *New York Times*, May 15, 2024. That said, the depth and durability of this self-declared no-limits partnership is still very much an open debate.

3 The term *buildup* is used in this study to describe an expansion in the number or types of nuclear weapons or delivery systems or defenses against them. The term *modernization* is used to describe in-kind replacement of aging systems with like numbers and types.

4 For an excellent and up to date overview of Russian, Chinese, and U.S. nuclear force postures and doctrines, see “World Nuclear Forces” in *SIPRI Yearbook 2024: Armaments, Disarmament and International Security* (Stockholm: Stockholm International Peace Research Institute, 2024), <https://www.sipri.org/sites/default/files/YB24%2007%20WNF.pdf>.

increased near-term threat of a major war.⁵ This adds up to the strong likelihood of a new era of nuclear arms racing.

The very idea of action-reaction nuclear arms racing is contested by some strategic theorists, mostly hawkish ones who see this tit-for-tat explanation of nuclear competition as an overly mechanistic simplification of the far more complex domestic and international political dynamics that are at play.⁶ Although the nuances implied by this critique are valuable and persuasive as a matter of theory, the popular conception of an arms race—a peacetime military competition between potential military adversaries in which both sides seek to pull ahead (or at least not fall too far behind)—nevertheless offers a useful shorthand to describe the quest for relative advantage that is a common feature of geostrategic rivalries. In this straightforward sense, this is unmistakably the early phase of a three-way superpower nuclear arms race in which the United States has been losing ground in recent years.⁷

These mounting challenges have been more than a decade in the making, and Washington's strategic orientation has been evolving in response. Deterrence has returned to the fore of U.S. strategic concerns as part of a broader shift in focus toward great power competition. There is even the first faint glimmer of an incipient consensus—both in the last Congress and within the outgoing Biden administration—that the United States may need to bolster its nuclear posture to effectively deter two strategic rivals that continue to arm against it.⁸

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- 5 Jane Harman, Eric Edelman, John M. Keane, Thomas G. Mahnken, Mara Rudman, Mariah Sixkiller, Alissa Starzak and Roger Zakheim, *Report of the Commission on the National Defense Strategy* (Washington, DC: Commission on the National Defense Strategy, July 2024), https://www.armed-services.senate.gov/imo/media/doc/nds_commission_final_report.pdf.
- 6 See for example Keith B. Payne, "Action-Reaction Metaphysics and Negligence," *Washington Quarterly*, 24, no. 4, 2001; Matthew Kroenig, "Arms Racing under Nuclear Tripolarity: Evidence for an Action-Reaction Cycle?" (Washington, DC: Atlantic Council, December 2022); Thomas G. Mahnken, "Arms Competition, Arms Control, and Strategies of Peacetime Competition from Fisher to Reagan," in *The New Makers of Modern Strategy: From the Ancient World to the Digital Age*, ed. Hal Brands (Princeton, NJ: Princeton University Press, 2023); and Matthew Costlow, Robert Peters, and Kyle Balzer, "A Misleading Metaphor: The Nuclear Arms Race," *War on the Rocks*, November 20, 2023, <https://warontherocks.com/2023/11/a-misleading-metaphor-the-nuclear-arms-race/>. There are variations in this argument. For example, whereas Payne cast broad doubts on the fundamental concept of action-reaction arms races, Kroenig merely argued these dynamics are less common and automatic than is often thought.
- 7 This core tripolar nuclear competition is complicated by secondary multipolar spinoffs, with Britain and France arrayed against Russia (and potentially China), India against China, and North Korea against the United States and its allies. For simplicity, this report focuses only on the core triangle of rival nuclear superpowers. For analysis that extends to multipolar aspects of today's nuclear landscape, see David A. Cooper, *Arms Control for the Third Nuclear Age* (Washington, DC: Georgetown University Press, 2021).
- 8 The roadmap for this fledgling consensus was laid out by the blue-ribbon bipartisan Congressional Commission on the Strategic Posture of the United States, and recent debates suggest the Commission's strategic reasoning is resonating in Congress (see, for example, Bryant Harris, "Senators Push to Update Nuclear Military Might in Defense Bill," *Defense News*, April 29, 2024). Likewise, the Biden administration has recently hinted that a more robust U.S. nuclear posture is needed (see Jonathan Landay, "Biden Aide Raises Possible Increased Nuclear Deployments of U.S. Strategic Nuclear Weapons," *Reuters*, June 8, 2024, <https://www.reuters.com/world/us/biden-aide-raises-possible-increased-deployments-us-strategic-nuclear-weapons-2024-06-07>; and David E. Sanger, "Biden Approved Secret Nuclear Strategy Refocusing on Chinese Threat," *New York Times*, August 20, 2024, <https://www.nytimes.com/2024/08/20/us/politics/biden-nuclear-china-russia.html>).

However, the role, usefulness, and achievability of nuclear arms control remains unclear within this evolving strategic reorientation.

As trilateral nuclear competition has gathered steam, the post-Cold War nuclear arms control system has fallen apart. The final straw came in early 2023, when Russia suspended its implementation of New START, the last remaining bilateral nuclear treaty (which in any case was set to expire in early 2026). Even the multilateral Outer Space Treaty, which has imposed a global ban on nuclear weapons in space since the 1960s, now teeters on the brink as Russia seems poised to deploy a nuclear-armed antisatellite weapon into orbit. As one senior U.S. arms control official has noted, “The Russian Federation has walked away from numerous, if not all of, the existing arms control treaties.”⁹ China for its part has rebuffed participating in any serious nuclear arms control talks, now and for the foreseeable future.¹⁰

Even the most ardent advocates of arms control concede its prospects for the foreseeable future are unpromising at best.¹¹ In March 2024, the latest in a string of high-level American entreaties for new arms control talks again fell on deaf ears in Moscow and Beijing.¹² At this juncture, the most optimistic hope seems to be that, despite having withdrawn from participating in New START, Moscow will nonetheless abide by an informal pledge to stay within the treaty’s core numerical limits until it expires in February 2026. Other than grasping at this temporary straw, it is not clear that there is any plausible plan or path forward beyond earnest supplication and clinging to forlorn hope. As things stand today, the world is most likely at the cusp of the first uncontrolled nuclear competition between rival superpowers since 1972—only this time, Washington faces not one but two rivals, neither of which shows any interest in negotiating limits on a nuclear competition they perceive as playing out in their favor.

Despite this deteriorating situation, surprisingly little attention has been given to rethinking how the U.S. approach to arms control could be recalibrated to better fit a dangerous and

9 Assistant Secretary of State Mallory Stewart, as quoted by Julian E. Barnes and David E. Sanger, “U.S. Seeks to Build World Pressure on Russia over Nuclear Weapon in Space,” *New York Times*, May 5, 2024, <https://www.nytimes.com/2024/05/03/us/politics/russia-space-nuclear-weapon.html>.

10 In November 2023, there was a U.S.–China consultative meeting of senior arms control experts. From an optimistic stance, just the fact of a meeting is a positive development because it was the first such dialogue in several years. However, like similar past encounters, there was no tangible progress and no follow-up process. See Chelsey Wiley and William Alberque, “Meagre Results from the U.S.–China meeting on Arms Control,” International Institute for Strategic Studies, November 21, 2023, <https://www.iiss.org/online-analysis/missile-dialogue-initiative/2023/10/meagre-results-from-the-us-china-meeting-on-arms-control/>.

11 Daryl G. Kimball, “Breaking the Impasse on Nuclear Disarmament, Part Two,” Arms Control Association, May 2024, <https://www.armscontrol.org/act/2024-05/focus/breaking-impasse-nuclear-disarmament-part-two>.

12 Guy Faulconbridge and Dmitry Antonov, “Russia Responds Icily to U.S. Hint on Arms Control Talks with Moscow and Beijing,” *Reuters*, March 20, 2024, <https://www.reuters.com/world/russia-says-strategic-talks-with-us-possible-only-part-broader-debate-2024-03-20/>; Michael R. Gordon, “Russia Rejects U.S. Proposal to Reopen Arms-Control Dialogue,” *Wall Street Journal*, January 18, 2024, <https://www.wsj.com/world/russia/russia-rejects-u-s-proposal-to-reopen-arms-control-dialogue-5ac6fc81>; and Kylie Atwood and Jennifer Hansler, “U.S. Says It Wants Dialog with Russia and China on Nuclear Arms Control,” *CNN*, June 2, 2023, <https://www.cnn.com/2023/06/02/politics/jake-sullivan-russia-china-nuclear-arms/index.html>.

complex new nuclear landscape. This report explores one possible element of such a recalibration, arguing that recent American efforts to preserve and strengthen arms control in an increasingly contested strategic milieu have lacked a critical ingredient for success: old-fashioned negotiating leverage.

CHAPTER 2

Just Wanting Arms Control is Not Enough

This chapter argues that, over the past decade, there has been a disconnect between ambitious American policy aspirations and disappointing real-world outcomes. It then examines factors that might motivate geopolitical rivals and potential military adversaries to engage in arms control rather than uncontrolled nuclear competition.

Disconnects between U.S. Aspirations and Outcomes

The near-total failure to strengthen or even preserve nuclear arms control for more than a decade has not been for lack of wanting or trying. Three U.S. administrations have been employing the same “hold and control” playbook since relations with Russia and China began to sour in the early 2010s. This two-pronged nuclear posture involves: (a) modeling restraint by modernizing aging systems with in-kind numbers and types rather than expanding the size or composition of U.S. nuclear forces and (b) simultaneously pushing for arms control talks to head off a nuclear arms race. Notwithstanding the sharply contrasting styles and tones of the Barack Obama, first Donald Trump, and outgoing Joe Biden administrations, they mostly stuck to a hold and control nuclear orientation.

Hold and control is a major recalibration of U.S. goals from the early post-Cold War period. Both the Bill Clinton and George W. Bush administrations sought to reduce the role of nuclear weapons in international relations. Each made unilateral cuts in American nuclear programs and deployments, with Bush codifying these as mutual cuts with Russia in the 2002 Strategic Offensive Reductions Treaty (SORT). The Obama administration came into office in 2009 with an audacious plan to launch a process of deep nuclear disarmament that would lead to nuclear abolition. The New START treaty with Russia in early 2010 evoked cautious optimism within the American arms control community that the United States could usher the other major nuclear powers down the aisle to deep disarmament.

These hopes proved fleeting when other key nuclear powers declined to go along. Rather than disarm, Russia and China pursued nuclear buildups. Meanwhile, responding to congressional concerns, the Obama administration resigned itself to the need to modernize the increasingly decrepit U.S. nuclear arsenal. This was a moment of retrenchment from seeking disarmament to just trying to hold the line. In hindsight, the inaptly named New START was the stopping point for old-school bilateral nuclear arms control. The treaty moreover delivered far less than what Washington had been seeking. Although valuable for restoring bilateral verification after the expiration of the original Strategic Arms Reduction Treaty (START), it did not require any significant new cuts below the levels set by SORT. To the contrary, New START allowed modest increases due to some quirky counting rules.¹³ U.S. calls to negotiate a more ambitious follow-on treaty went nowhere. The situation further deteriorated when, soon after Russia’s first invasion of Ukraine and forced annexation of Crimea, the Obama administration disclosed that Moscow was violating the 1987 Intermediate-Range Nuclear Forces (INF) Treaty by secretly developing and testing banned cruise missiles.

The first Trump administration brought more of the same, despite stylistic discontinuities between Obama’s disarmament grandiloquence and Trump’s mercurial boasts about winning a nuclear arms race. These doubtless reflected the dovish and hawkish preferences of their respective political bases. In terms of actions, however, there was more continuity than divergence. Although the Trump administration struck a markedly tougher tone—insisting Russia must comply with treaties and Beijing must come to the arms control table—it mostly maintained the hold and control policy the Obama administration had settled for after coming away emptyhanded on deep disarmament.

There were some minor changes to U.S. nuclear posture in 2018, focusing on longstanding concerns about the extreme disadvantage the United States faced in substrategic systems. The Trump team deployed a new low-yield warhead on existing Trident submarine-launched ballistic missiles (SLBMs) and initiated the development of a new nuclear-armed intermediate-range sea-launched cruise missile (SLCM-N).¹⁴ These relatively modest substrategic initiatives—which were carried forward by the Biden administration, albeit somewhat reluctantly for SLCM-N—did not, however, represent anything like a significant nuclear buildup.

In August 2019, Trump withdrew from the INF Treaty, citing full-scale Russian deployments of banned cruise missiles. Nevertheless, the U.S. refrained from deploying its own intermediate-range nuclear missiles in response and again renewed calls for new arms control talks. These calls intensified in 2020 when the White House created a special presidential envoy for arms control with a mandate to negotiate a trilateral replacement for New START with Russia and China before the bilateral treaty expired in early 2021. In sum, the first Trump administration mostly stuck to the same hold and control playbook that its predecessor

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13 Counting strategic bombers as carrying only one deployed nuclear weapon when they carry many more.

14 Funding for SLCM-N was cut by the Biden administration in 2023 but restored by Congress in 2024.

had settled for. Once again, though, this approach failed to yield results. Russia and China continued their nuclear buildups while evincing no enthusiasm for new arms control, trilateral or otherwise.

Days after taking office in January 2021, Biden scored a rare if modest and temporary arms control success when he joined Russian President Vladimir Putin to invoke a New START provision allowing a one-time five-year extension by mutual agreement. The stage seemed set for a more significant breakthrough a few months later, when Biden and Putin launched a strategic security dialogue “to lay the groundwork for future arms control and risk reduction measures.”¹⁵

Unfortunately, this progress proved evanescent. Not only did Russia not negotiate new arms control, within two years it had suspended participation in New START. Although Moscow claims it still honors the treaty’s core limits, it has refused to permit required inspections or consultations and has repeatedly rebuffed high-level American initiatives to resume arms control talks. Even if one trusts that Russia is still abiding by core treaty limits absent verification, it seems nearly certain that New START will expire in February 2026 with no bilateral or trilateral successor agreement in place or even under negotiation. At the same time, China continues to resist American calls for a meaningful dialogue on arms control.¹⁶

This grim situation looks to get worse once New START expires next year. According to the outgoing Biden administration’s senior arms control diplomat, “Quite frankly, the biggest risk is an unbridled, unconstrained nuclear arms race, which no one wants, no one needs, and the international community should be outraged that we’re now stumbling toward that eventuality.”¹⁷

Despite these arms control failures, the Biden administration has stuck to the same playbook by calling for arms control while forgoing any significant nuclear expansion beyond modernization in place.¹⁸ Explaining this policy of self-restraint, Defense Secretary Lloyd Austin argued, “Nuclear deterrence isn’t just a numbers game. In fact, that sort of thinking can spur a dangerous arms race.”¹⁹ Meanwhile, the administration’s top-line strategy

15 The White House, “U.S.–Russia Presidential Joint Statement on Strategic Stability,” June 16, 2021, <https://www.whitehouse.gov/briefing-room/statements-releases/2021/06/16/u-s-russia-presidential-joint-statement-on-strategic-stability/#:~:text=Biden and President of the,the threat of nuclear war.>

16 For an excellent recent account of the state of play of American arms control outreach to Russia and China, see Arms Control Today, “Engaging China and Russia on Arms Control: An Interview with U.S. Assistant Secretary of State Mallory Stewart,” Arms Control Association, May, 2024, <https://www.armscontrol.org/act/2024-05/interviews/engaging-china-and-russia-arms-control-interview-us-assistant-secretary>.

17 Ibid.

18 It is not clear what nuclear changes the incoming Trump administration might bring, but it seems likely that a second Trump administration would be even more inclined to strengthen American nuclear capabilities.

19 Lloyd J. Austin, “Remarks by Secretary of Defense Lloyd J. Austin III at the U.S. Strategic Command Change of Command Ceremony (As Delivered),” Department of Defense, December 9, 2022, <https://www.defense.gov/News/Speeches/Speech/Article/3241858/remarks-by-secretary-of-defense-loyd-j-austin-iii-at-the-us-strategic-command/>.

continued to emphasize strengthening arms control to “head off costly arms races, reduce the likelihood of miscalculation, and complement U.S. and allied deterrence strategies.”²⁰

These are worthy goals. At this point, however, there is no reason to think continuing to do the same thing will yield different results. Put bluntly, the strategy for achieving these goals is long overdue for recalibration. The transition to a second Trump administration offers a timely opportunity for such an arms control reboot.

Strategic Rivals Negotiate When It Serves Their Interests

While the United States has been proclaiming the need to avert a new nuclear arms race, Russia and China have been arms racing around and away from arms control for well over a decade. These presumably have been deliberate choices in furtherance of rational and predictable aims: for Moscow, to preserve (or perhaps expand) its existing nuclear advantage over Washington (which Putin often boasts about when rattling the nuclear saber); for Beijing, to attain (or perhaps exceed) nuclear parity with Washington as part of a broader effort to achieve peer superpower status across the board. Arms control offers little value to Washington’s primary strategic rivals if they are already making headway toward their goals without it.

A dense fog of wishful thinking about this point permeates the American arms control and disarmament community. For instance, the Union of Concerned Scientists has argued tactical nuclear weapons pose a grave threat to the taboo against using nuclear weapons because they pose less escalation risk than strategic systems. This concern is understandable given that Russia has repeatedly threatened to use tactical nuclear weapons against Ukraine. However, the three-phase policy response this prestigious organization has recommended for the United States to pursue is a characteristic example of unrealistic expectations:

1. Washington pledges not to develop or deploy any new tactical or low-yield nuclear weapons,
2. Washington withdraws all tactical nuclear weapons deployed overseas in several North Atlantic Treaty Organization (NATO) countries, and
3. Washington and Moscow negotiate a new treaty to limit and eventually eliminate tactical nuclear weapons.²¹

This sequencing has the order backwards. The first two steps are inducements Washington might offer as bargaining concessions if it convinced Moscow to negotiate on substrategic

20 The White House, “National Security Strategy,” October 2022, p. 30, <https://www.whitehouse.gov/wp-content/uploads/2022/10/Biden-Harris-Administrations-National-Security-Strategy-10.2022.pdf>.

21 “What Are Tactical Nuclear Weapons?” Union of Concerned Scientists, June 1, 2022, <https://www.ucsusa.org/resources/tactical-nuclear-weapons>.

nuclear forces. Moscow would have no reason to negotiate mutual limits after Washington imposed stringent limits upon itself. Russia already boasts at least a tenfold advantage in substrategic nuclear forces. Freezing or widening this gap would not make Moscow more likely to negotiate.

As this example illustrates, American arms control thinking seems to have lost sight of the role leverage plays in almost all competitive bargaining situations, especially those with antagonistic strategic rivals. This myopia is a holdover from the post-Cold War era, during which Washington had tremendous economic, military, and political leverage while enjoying relatively benign relations with China and Russia. Because this is no longer the case, however, new thinking is needed that takes a clear-eyed view of the inherent relationship between leverage and successful negotiating outcomes.

All competitive negotiations share similar contours. What is unremarkable and readily apparent in shaping the outcome of a contract negotiation—which side has more overall leverage and what bargaining chips each is willing to trade—is also true for nuclear arms control. Many people think that dealing with autocratic leaders requires a particular toughmindedness. As one former senior U.S. official observed, “Autocrats see restraint and caution as signs of weakness; they see strength in resolve.”²² History suggests there is something to this observation, but there is no need to presume dealing with the autocratic mindset poses unique challenges. It is difficult to negotiate with a weak hand under almost any circumstance.

When a union contract expires, the process of collective bargaining for a new contract will be framed by current conditions. If the economy is booming in a tight labor market, the union will have the upper hand and is likely to demand and get concessions from management; during a recession with a tight jobs market, management will likely make the demands and get the concessions. This fundamental dynamic is familiar to anyone who has bought or sold a house in a hot buyer’s or seller’s market. This is Bargaining 101. Just as one should never tell a prospective buyer’s real estate agent you are desperate to sell the house, Washington’s repeated entreaties for arms control to prevent an arms race will be counter-productive if they are perceived by rivals as signs the United States is desperate to avoid an arms race.

The notion that successful arms control between strategic rivals requires a hardnosed brand of competitive negotiating is nothing new. This adversarial approach gradually fell away after the Cold War, but it was taken as a given during that period of tense superpower confrontation. The classic Cold War model of nuclear arms control assumes negotiating nuclear treaties is tense and competitive and that any successful outcome would be a limited, distrustful, and self-interested brand of cooperation between otherwise staunch rivals. This

22 Mark T. Kimmitt, “How the West Is Helping Ukraine Won’t Be Enough to Win,” *Politico*, May 8, 2024, <https://www.politico.eu/article/how-west-help-ukraine-not-enough-win-war-russia/>.

model became prominent in the early 1960s as a stark break from the idealistic assumptions that had underpinned disarmament thinking.

Early arms control theorists like Hedley Bull and Thomas Schelling never imagined either of the Cold War superpower rivals would negotiate limits in a spirit of altruism and goodwill. To the contrary, neither superpower would agree to any arrangement that put it at a relative disadvantage. Arms control must be seen as mutually beneficial, but even this does not ensure success if either side believes it could claw its way to advantage in uncontrolled competition. Given the opportunity, either superpower would prefer to achieve nuclear superiority than negotiate a stable nuclear balance—otherwise known as a stalemate. Stalemate may be the most logical solution to the nuclear dilemma, but it flies in the face of traditional thinking about how to maximize military clout and security.²³

Because achieving arms control is unrealistic if the results put one party at a relative disadvantage, any plausible arms control initiative must provide tradeoffs yielding a roughly equitable arrangement. Each side must also be convinced that superiority is out of reach. Only then, and only given the horrific mutual societal destruction a nuclear war would entail, is negotiating a stable nuclear balance (a stalemate) preferable to the risks and costs of a back-and-forth arms race neither side can win and hold. These hardnosed nationalist calculations are far removed from calls for benevolent cooperation in the service of all humanity.

In other words, a hardnosed approach has always been baked into the nuclear arms control cake. Today, this ingredient seems to be missing from the recipe that in decades past has seen arms control succeed amid intense strategic rivalry between hostile nuclear superpowers.

23 See Hedley Bull, *The Control of the Arms Race: Disarmament and Arms Control in the Missile Age* (New York: Praeger, 1961); and Thomas C. Schelling and Morton H. Halperin, *Strategy and Arms Control* (New York: Twentieth Century Fund, 1961).

CHAPTER 3

The Case for a Tougher Dual-Track Approach

The previous chapter argued that the hold and control approach Washington has been using for more than a decade has not yielded positive outcomes and is unlikely to do so in the future. This chapter explores the merits of reviving a more toughminded dual-track arms control strategy that seeks to incentivize arms control by engaging in enough arms racing to convince rivals they cannot achieve and sustain a sizeable nuclear advantage. In effect, this approach seeks to convince Russia and China that a nuclear arms race will end only in a stalemate and that it is therefore not worth the effort. The chapter begins by recalling the success of this approach during the Cold War. It then explores why today's Russia and China will have few incentives to pursue arms control rather than continuing their ongoing nuclear buildups until and unless the United States changes their cost-benefit calculations.

Hardnosed Lessons from Cold War Successes

In contrast to the current hold and control blueprint, the Cold War saw the United States pursuing a tougher compete and control approach. Commonly dubbed the dual-track (or two-track or double-track) strategy, it included: (a) showing it was willing to arms race if necessary to prevent Moscow from attaining an unchallenged nuclear edge and (b) proposing arms control measures to create and preserve a rough nuclear balance as an alternative to arms racing. In effect, this was a deliberate strategy of arms racing from behind to preserve a deterrent balance in the absence of arms control and to acquire bargaining chips to incentivize the Soviets to negotiate seriously on arms control as an alternative way to achieve and preserve transparent, predictable mutual deterrence.

Arms racing while seeking arms control may seem a bit contradictory to the modern observer, yet this tandem approach was taken as a given during the Cold War. As a former top U.S. arms control diplomat noted, "Every U.S. president since the Cold War began felt

compelled to try to find some ways to control nuclear weapons—even though most of them were at the same time also building up our nuclear arsenal.”²⁴ Bizarre as the notion of arms racing toward arms control may seem, it has a compelling logic that is grounded in the immutable realities of bargaining leverage.

Nuclear Freeze Flip-Flop

Cold War history is replete with instances when relative leverage seemed to be a critical factor shaping arms control stances and outcomes. A revealing example is the trajectory of U.S. and Soviet attitudes vis-à-vis the recurrent idea of a mutual nuclear freeze to halt the arms race in its tracks.

In the late 1960s, the United States maintained a decisive nuclear advantage over the Soviet Union.²⁵ However, Moscow was determined to close the gap and was steadily catching up. At the same time, Moscow was seen as ahead in the race to develop strategic missile defenses. In this context, President Lyndon Johnson launched the first serious U.S. attempt to negotiate bilateral arms limits. Leading up to a summit with his Soviet counterpart in January 1967, he proposed a mutual freeze on nuclear force levels and that both sides give up their efforts to develop strategic missile defenses. As historian James Cameron noted, “Johnson’s attempts at a bilateral strategic arms accord sought to persuade the Soviets to halt their buildup, thereby preserving the American nuclear dominance.”²⁶

At the Glassboro Summit, the Soviets rejected this proposal out of hand. Presumably, they had no interest in locking in a temporary disadvantage that they were in the process of erasing while nullifying their lead in the race to field missile defenses. Instead, Moscow would counterpropose that both sides reduce their nuclear forces to equal lower levels and leave missile defense off the table. The Johnson administration rejected this idea, seeing it as a Soviet ploy to get the United States to make proportionately larger cuts while allowing Moscow to press its advantage on missile defenses, which would be more effective against a smaller U.S. nuclear force.

By the late 1970s, the tables had turned. Moscow had overtaken Washington to achieve a growing nuclear advantage.²⁷ However, the Jimmy Carter and Ronald Reagan administrations were determined to narrow this gap with a renewed nuclear buildup. Reagan also launched the Strategic Defense Initiative (SDI) in 1983 to jumpstart research on new missile

24 Avis T. Bohlen, “Arms Control in the Cold War,” Foreign Policy Research Institute, May 15, 2009, <https://www.fpri.org/article/2009/05/arms-control-in-the-cold-war/>.

25 Hans M. Kristensen, Matt Korda, Robert S. Norris, Eliana Johns, and Mackenzie Knight, “Estimated Global Nuclear Warhead Stockpiles, 1945–2024,” *Federation of American Scientists*, 2024, <https://fas.org/initiative/status-world-nuclear-forces/>.

26 James Cameron, *The Double Game: The Demise of America’s First Missile Defense System and the Rise of Strategic Arms Limitation* (New York: Oxford University Press, 2018), 80.

27 Kristensen et al.

defense technologies. This led Moscow to fear Washington could be on track to clinch a defensive advantage. This strategic landscape was almost the mirror opposite of the late 1960s: Moscow was ahead on nuclear forces but feared Washington could begin to close the gap while pulling ahead on missile defenses. In this mirror-opposite context, the Reagan administration staunchly opposed a popular domestic grassroots movement calling for a nuclear freeze, an idea Moscow naturally supported. The administration argued a freeze would be disadvantageous because it would lock in a Soviet advantage the United States was actively working to narrow.²⁸ Instead (pursuant to the START and INF initiatives), the United States was calling on both sides to reduce their nuclear forces to equal lower levels and leave missile defense off the table. Moscow rejected these U.S. calls for deep cuts to mutual levels and insisted on retaining or strengthening missile defense limits. This should sound familiar. The two sides, having swapped their relative advantages, had neatly swapped their arms control stances.

This brief account vastly oversimplifies the complexities of the evolution of the nuclear postures and arms control stances of the two superpowers between the late 1960s and early 1980s. It ignores the influences of domestic and bureaucratic politics, different nuclear force structures and doctrines, new missile defense limitations set by the 1972 Anti-Ballistic Missile (ABM) Treaty, and conventional military balances, to name but a few. Simplifications notwithstanding, the nuclear freeze flip-flop offers a vivid example of how perceptions of current and prospective relative advantage can profoundly influence rivals' attitudes about arms control. This insight lies at the heart of the logic for pursuing nuclear arms control while arming to close nuclear gaps.

INF Treaty Negotiations

Although this study uses the term “dual-track” in a broad conceptual sense, the popular origin of the term is a Carter Administration response to the Soviet deployment of nuclear-armed SS-20 road-mobile intermediate-range ballistic missiles (IRBMs) that started in 1976. The Soviets deployed these missiles on their own territory but within targeting range of North Atlantic Treaty Organization (NATO) countries. U.S. nuclear deployments in Europe at the time were limited to short-range battlefield systems. The SS-20 deployments therefore afforded the Soviets a major escalation advantage. The Soviets and their Warsaw Pact allies had decisive conventional military superiority on the ground in Europe, forcing NATO to threaten to use tactical nuclear weapons to deter conventional aggression. The new Soviet IRBMs undercut the credibility of this threat. The Soviets could retaliate against battlefield nukes that could not hit Soviet territory with SS-20 attacks that could hit NATO targets,

28 Reagan publicly insinuated that the Soviets were secretly behind the freeze movement in the United States and Western Europe. See John M. Goshko, “Administration Opposes Nuclear Weapons Freeze,” *The Washington Post*, March 11, 1982, <https://www.washingtonpost.com/archive/politics/1982/03/12/administration-opposes-nuclear-weapons-freeze/bc77fbc5-cfd8-45aa-b073-0770e2f461cf/>; and George Lardner, Jr., “Soviet Role in Nuclear Freeze Limited, FBI Says,” *The Washington Post*, March 26, 1983, <https://www.washingtonpost.com/archive/politics/1983/03/26/soviet-role-in-nuclear-freeze-limited-fbi-says/cf209f9e-ed79-4264-a83b-8444901195f8/>.

but not the U.S. homeland. If they did, Washington, lacking IRBMs in Europe, could only respond with strategic (intercontinental) nuclear strikes. Washington's allies were deeply concerned that this could decouple the U.S. nuclear deterrent from NATO because such a U.S. response would invite strategic retaliation against American targets. Allies such as Germany were profoundly worried about this substrategic nuclear imbalance.

On December 12, 1979, NATO foreign and defense ministers took decisive action by announcing what they called a dual-track (or two-track) decision to counterdeploy almost 600 nuclear-armed American IRBMs and ground launched cruise missiles (GLCMs) that could hit key targets within the Soviet Union.²⁹ Crucially, though, NATO would delay these tit-for-tat counterdeployments until 1983. The stated reason for this delay was to allow time to negotiate an acceptable alternative in the form of a reciprocal bilateral treaty between Washington and Moscow that would set equal limits on the deployment of INF. Moscow initially rejected participating in any INF talks but relented in less than a year. Formal INF talks began in late 1981 in the shadow of the looming NATO counterdeployments.

The Soviets played hardball in the runup to the planned NATO counterdeployments. At the negotiating table, they rejected intrusive verification measures. They also waged an information campaign to stir antideployment sentiments in Western Europe. Despite widespread public protests, NATO held firm and the counterdeployments began in November 1983. Completed over the next two years, these deployments reversed which side had the escalation advantage. Now, the United States could use IRBMs and GLCMs to strike key strategic targets within the Soviet Union, but Moscow could still only reach the American homeland by escalating to strategic forces and risking general nuclear war. The proximity of the U.S. nuclear missiles also gave Washington the new ability to launch a short-warning attack against command and control targets in Moscow.³⁰ For those in Moscow and Washington who subscribed to this type of escalation advantage thinking, this was a dramatic reversal of leverage.

Moscow responded by walking out of the INF and START negotiations when the U.S. deployments began. Like today, American hopes for arms control seemed all but dead without a willing negotiating partner.

Then a funny thing happened. As the deployments were nearing completion, the Soviets suddenly pivoted back to arms control. In January 1985, Soviet Foreign Minister Andrei Gromyko and American Secretary of State George Schultz agreed to launch a new round of arms control talks with parallel tracks focusing on INF, START, and space issues. Less than three years later, the INF Treaty had been signed and the START negotiations were making

29 For an excellent archival trove on the 1979 NATO decision, see William Burr, ed., "Thirtieth Anniversary of NATO's Dual-Track Decision: The Road to the Euromissiles Crisis and the End of the Cold War," *The National Security Archive*, December 10, 2009, <https://nsarchive2.gwu.edu/nukevault/ebb301/index.htm>.

30 Rose Gottemoeller, "U.S.–Russian Nuclear Arms Control Negotiations: A Short History," *Foreign Service Journal*, May 2020, <https://afsa.org/us-russian-nuclear-arms-control-negotiations-short-history>.

noteworthy progress. In hindsight, 1985 was when nuclear arms control turned the corner, quickly transmogrifying from total collapse to astounding progress.

American officials involved at the time believe the missile counterdeployments played a key role in this breakthrough by incentivizing the Soviets to get serious.³¹ In the words of a key National Security Council official, “The gist was that, as the Soviets realized...they had not blocked Pershing [IRBM deployments] and that NATO was united, they began to get serious in 1985, even before [Mikhail] Gorbachev took leadership.”³² A career Defense Department official directly involved in overseeing the INF negotiations likewise vividly remembered that, when talks resumed after the U.S. counterdeployments, the Soviets came back to the bargaining table with a new sense of purpose.³³ Another career official who worked on INF negotiations at both the Arms Control and Disarmament Agency (ACDA) and in the Office of the Secretary of Defense (OSD) emphatically recalled that “the deployments were absolutely essential. The Soviets wouldn’t have done it [INF] otherwise. They thought that as an Alliance we wouldn’t be able to pull it off. But we did, despite their driving wedges through public information operations. But once they knew we were serious, they came back.”³⁴

Progress in the renewed INF talks was even more remarkable given the audacity of what the United States was proposing. When the talks resumed, the U.S. raised the stakes with a brash new proposal: a total and verifiable global bilateral ban on land-based short- and intermediate-range missiles, whether nuclear or conventionally armed. The ambition of this “global zero” proposal was so unprecedented that some State Department officials were convinced it was more than the Soviets would countenance.³⁵ However, this is exactly what the Soviets agreed to when the INF Treaty was signed two years later. As the senior ACDA representative to the INF talks recalled, “We got far more than we ever expected.”³⁶ Reagan spoke to a common understanding when he observed, “To a large extent, the Treaty is the result of Allied solidarity in support of the fundamental objectives established by NATO’s ‘dual-track’ decision in 1979.”³⁷

31 Author interviews with Ambassador Linton F. Brooks, M. Elaine Bunn, Richard Davis, Ambassador Thomas Graham, Jr., Ambassador Robert Joseph, Susan J. Koch, George Look, and others who asked not to be cited by name.

32 Interview with Ambassador Ronald F. Lehman, II.

33 Interview with a then mid-level OSD official who asked not to be cited directly by name.

34 Interview with M. Elaine Bunn.

35 Indeed, because “global zero” was the brainchild of a notoriously hawkish Pentagon official, Assistant Secretary of Defense Richard Perle, some insiders were (and remain) convinced that his secret intention was to scuttle negotiations by proposing a “poison pill” the Soviets would be sure to reject (interviews with Richard Davis, George Look, and Susan Koch). However, two OSD staffers at the time recalled that the decision to switch to “global zero” from the less ambitious proposal to require the Soviets to withdraw their INF east of the Ural mountains in return for a U.S. INF withdrawal was made in response to strong Japanese objections to a geographic limit that would shift Soviet INF from Europe to Asia (interviews with M. Elaine Bunn and a former OSD official who asked not to be cited directly by name).

36 Interview with Thomas Graham, Jr.

37 Acquisition: Office of the Assistant Secretary of Defense, “INF Treaty: 1988 Letter of Transmittal,” <https://www.acq.osd.mil/asda/ssipm/sdc/tc/inf/INF-Transmittal.html>.

START Negotiations

INF may be the origin of the term “dual-track,” but there were other instances when an implicit dual-track strategy seems to have yielded positive results. The strategic modernization and buildup initiated by the Carter administration and continued and expanded under Reagan is a case in point. The Reagan administration not only proposed and negotiated START in tandem with a strategic buildup, but it also explicitly argued to Congress that strategic modernization was necessary to close a gap in strategic offensive forces and to provide negotiating leverage for achieving this goal through arms control instead.

A critical U.S. concern was the advantage the Soviets had gained by deploying the SS-18 heavy intercontinental ballistic missile (ICBM). This system had a throw-weight advantage over American ICBMs that let it carry more multiple independently targetable reentry vehicles (MIRVs) per missile. There was also concern about the Soviet introduction of new mobile ICBMs, an inherently more survivable deployment variant that the United States did not possess.³⁸

In response to these perceived gaps, the Reagan administration sought to develop a rail-mobile heavy ICBM, the MX (later named Peacekeeper), and a smaller road-mobile ICBM known as Midgetman. The MX/Peacekeeper was planned as both rail mobile and heavily MIRVed even as the United States was pushing START proposals that would impose mutual constraints on these very capabilities. By doing this, Washington was implicitly mirroring the INF dual-track dynamic. The message was clear: You agree to mutual arms control constraints on these types of systems for which you currently have an advantage, or else we will build up to reduce or eliminate that advantage. The latent promise that SDI might someday neutralize any Soviet strategic offensive advantage was another piece of this counterleverage equation. Internal Soviet economic worries may have further boosted the leverage afforded by these U.S. dual-track arms racing steps given the added costs that Moscow would have to bear to prevent allowing Washington to catch up.³⁹

START led to deep mutual cuts to equal levels that included strict sublimits on heavy and mobile ICBMs. As a result, the U.S. curtailed production of the MX/Peacekeeper heavy ICBM, cancelled its mobile rail garrison deployment component, and cancelled the Midgetman road-mobile ICBM before it was ever deployed. Arms control had eliminated the gap these systems had been intended to close.

In summary, the U.S. strategic buildup that started in the late 1970s ended in a mutual arms control arrangement that provided for a rough strategic balance that was transparent and

38 For revealing insight into the strategic competition mindset of the day, see Edgar Ulsamer, “Gains and Gaps in Strategic Forces,” *Air Force Magazine*, September 1985.

39 According to the U.S. chief START negotiator, his counterpart privately admitted as much during the negotiations (Brooks interview). That said, some recent scholarship has called into question the popular narrative that the 1980s arms race pushed the Soviet Union into economic collapse. See for example Beth A. Fischer, *The Myth of Triumphalism: Rethinking President Reagan's Cold War Legacy* (Lexington, KY: University Press of Kentucky, 2019).

predictable. There are legitimate questions about the direct cause and effect leading from U.S. buildup to arms control success, as discussed later in this chapter. However, the fact remains that events played out exactly as the Reagan administration had predicted when it made the case to Congress and the public for funding nuclear expansion as a way to gain negotiating leverage.⁴⁰

ABM Treaty Negotiations

Another instance of a seemingly successful dual-track arms control strategy predates the INF and START period. As described earlier in this chapter, Washington's first foray into bilateral nuclear arms control was in the late 1960s, when the Johnson administration proposed that both sides abandon efforts to develop strategic missile defenses in conjunction with freezing their strategic offensive buildups. Washington was deeply worried that a Soviet breakthrough on ABM systems could upend the strategic balance.⁴¹ The call to forgo strategic missile defenses reflected U.S. fears that the Soviets were ahead in this area as well as a strategic calculation that limits on strategic offensive forces would only be feasible if accompanied by limits on missile defenses.⁴²

After the Soviets rejected mutual limits on missile defenses, the Johnson administration redoubled efforts to develop and deploy MIRVs to overwhelm Soviet missile defenses and moved ahead with plans to deploy its own Sentinel ABM system to protect major cities across the United States. Even as it was pressing forward with these efforts, however, Washington continued to call for negotiations on offensive and defensive limits. This prompted expert-level bilateral discussions that evolved into the Strategic Arms Limitation Talks (SALT) that began under the Richard Nixon administration in November 1969.

Just months before this, the Nixon administration had rebranded Sentinel as Safeguard and reoriented its focus from defending cities to protecting ICBM and strategic bomber bases. This reorientation was cheaper—helping to secure contentious congressional funding—and far more relevant to the contested strategic balance by focusing on protecting retaliatory strategic offensive forces. The following year, as SALT negotiations continued, Washington deployed the first MIRVs, a game-changing technical breakthrough that decisively shifted the offense–defense advantage to offense. It would take the Soviets five more years to match this technical breakthrough.

40 For a good example of this rationale, see Reagan, "The MX: A Key to Arms Reduction," *The Washington Post*, May 23, 1983, <https://www.washingtonpost.com/archive/politics/1983/05/24/the-mx-a-key-to-arms-reduction/88ffcdcf-854b-4f1c-8f1f-of4104d1ef81/>.

41 For insightful in-depth consideration of this and other technology twists impacting Cold War nuclear competition, see David W. Karn, Jr., *Great Power Security Cooperation: Arms Control and the Challenge of Technological Change* (Lanham, MD: Lexington Books, 2015).

42 The rationale is that there is an offense–defense balance in that the most effective means to defeat missile defenses is to overwhelm them with larger numbers of targets. Limits on strategic offensive forces therefore could tilt this balance toward missile defenses unless these were also limited.

Less than two years later, the 1972 ABM Treaty was signed, prohibiting nationwide missile defenses and restricting each side to two ABM sites limited to only 100 interceptor missiles each. This first-ever bilateral arms control treaty came less than five years after the Soviet refusal to even discuss the idea of mutual missile defense restrictions.⁴³

Washington's post-1967 decisions to develop and deploy MIRVs and strategic missile defenses seem to have played a role in convincing the Soviets to engage seriously in ABM negotiations. Just as in the subsequent experiences with INF and START, the coincidence of the United States acting to close gaps and Moscow's subsequent openness to negotiating relevant mutual controls is striking. This example adds another piece to the compelling circumstantial case that a dual-track approach can provide leverage to incentivize reluctant rivals to get serious about negotiated alternatives to uncontrolled nuclear competition.

Some contest the idea that cases such as these demonstrate that relative leverage influences arms control stances and outcomes. For example, former congressional analyst Amy Woolf has made the counterargument that correlation does not equal causation:

Even when the correlation between [U.S.] spending and arms control exists, robust funding and modernization were not the sole cause of successful negotiations and, in some cases, may not have even been necessary.... The Soviet Union, even when motivated by a desire to alter the U.S.–Soviet military balance, had a number of other reasons to participate in arms control. Domestic politics, budgetary considerations, the limits of technology, and a changing political and security environment all played a role.⁴⁴

Woolf and prominent Russian arms control expert Pavel Podvig have pointed in particular to the 1985 ascendency of the reformist Soviet leader, Gorbachev, as a more important explanation for the Soviet turnaround on INF and START, seeing the Soviet arms control turnaround as part of his wider agenda to reform the Soviet economy and ease tensions with the United States.⁴⁵

This argument has elements of truth but is somewhat disingenuous. First, it downplays that the big Soviet turnaround on arms control—agreeing to end the boycott and resume negotiations in January 1985—came prior to Gorbachev's ascendency. Second, it ignores the possibility that the economic burdens of an escalating arms race may have played a role in facilitating Gorbachev's rise and motivating his desire to improve relations with Washington. Third, Woolf's analysis focuses too narrowly on the correlation with spending, which may not reflect the strategic and psychological impacts of the NATO missile deployments or Soviet fears that SDI could deliver game-changing missile defense breakthroughs that would

43 For thoroughgoing historical accounts of the often-overlooked period before, during, and after the 1967 Glassboro summit that led to the formal SALT process, see Cameron, *Double Game*; and John D. Maurer, *Competitive Arms Control: Nixon, Kissinger, and SALT, 1969-1972* (New Haven, CT: Yale University Press, 2022).

44 Amy Woolf, "Bargaining with Nuclear Modernization: Does It Work?" Arms Control Association, October 2020, <https://www.armscontrol.org/act/2020-10/features/bargaining-nuclear-modernization-does-it-work>.

45 Pavel Podvig, "Did Star Wars Help End the Cold War?" *Science and Global Security* 25, no. 1, Winter 2017.

offset their offensive advantage. Finally, Gorbachev's rise certainly does not explain the breakthrough on ABM Treaty negotiations more than a decade earlier. Correlation may not always indicate causation, but often it does. There is too much coincidence in the Cold War experience to easily dismiss it.

Putting such flaws aside, however, Woolf's fundamental point is certainly valid. Changes in the alignment of domestic politics, national economies, leader traits, technology, and the wider security environment do matter. But the relative balance of hard leverage matters too. Any basic textbook on foreign policy theory acknowledges that factors like Woolf's can be important influences, but they are always in conjunction with, and usually secondary to, hard power and national interest considerations.⁴⁶ Relative leverage is never the only influence on arms control stances and outcomes, but it should be understood as extremely consequential.

In sum, the Cold War experience offers compelling circumstantial evidence that relative leverage was once a key ingredient in America's recipe for arms control success. This strongly suggests that it needs to be taken into account as a crucial factor in the prospects for success or failure of contemporary U.S. aspirations to employ arms control to shape the contours of today's competitive tripolar nuclear landscape.

Why China and Russia Have Few Reasons to Negotiate

Neither Beijing nor Moscow has strong incentives to engage seriously in a nuclear arms control process if the United States maintains what amounts to a static nuclear posture. To the contrary, with Washington continuing to self-restrain in the absence of arms control—modernizing in place without boosting numbers or developing and deploying new types of systems—its nuclear rivals have no incentive to get entangled in mutual agreements that limit their own ongoing buildups, other than the extent to which Moscow and Beijing may be worried about each other despite their increasingly close geopolitical alignment.⁴⁷ Assuming that each now sees Washington as its primary nuclear rival, neither has much to gain from arms control as things stand.

For China, the issue is catching up from far behind. Until recently, China unambiguously eschewed nuclear first use and was content with a minimal nuclear deterrent posture. The modest Chinese nuclear arsenal did not deploy a triad of modern counterforce systems on

46 See, for example, Nikolas Gvosdev, Jessica D. Blankshain, and David A. Cooper, *Decision-Making in American Foreign Policy: Translating Theory into Practice* (New York: Cambridge University Press, 2019).

47 It is certainly very likely that Russia and China still target each other. For example, leaked Russian documents from as recently as 2014 reveal plans to use tactical nuclear weapons to repel a Chinese invasion. See Max Seddon and Chris Cook, "Leaked Russian Military Files Reveal Criteria for Nuclear Strike," *Financial Times*, February 28, 2024, <https://www.ft.com/content/f18e6e1f-5c3d-4554-ae5-50a730b306b7>.

high alert that would put it on an equal footing with the United States or Russia. Those days are over.⁴⁸

Experts at the Federation of American Scientists (FAS) have estimated that, as of last year, China's accelerating nuclear buildup was transforming its nuclear arsenal into a modern triad with more than 500 nuclear weapons.⁴⁹ This is an astonishing 40 percent increase in total weapons over just five years. This rapid nuclear expansion has led the U.S. Defense Department to assess that Beijing is on track to achieve rough parity in total number of deployed nuclear weapons over the coming decade or so (assuming Washington does not boost its own deployments) with no declared end goal to indicate it plans to stop at parity.⁵⁰ Some hawkish analysts have argued there is no reason to think China will stop at parity and that it is likely sprinting for outright nuclear advantage.⁵¹

China, like Russia, is putting a strong emphasis on ICBMs. It already exceeds the United States in the number of land-based launchers (missile silos) and is rapidly increasing this lead.⁵² In addition to building hundreds of new missile silos, China already deploys MIRVed silo-based and road-mobile ICBMs and is developing a new generation of such systems.⁵³ In contrast, the United States does not deploy and is not developing road-mobile ICBMs and does not deploy MIRVs on any of its land-based ICBMs. Beijing is expected to have more ICBMs than Washington by 2030.⁵⁴ If these ICBMs are MIRVed and Washington's still are

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- 48 Beijing still claims to adhere to no first use and has even suggested the possibility of a no first use pledge among the nuclear powers. However, there is increasing ambiguity to its commitment to no first use, and it is developing more robust substrategic and strategic counterforce systems operating at higher alert levels that increasingly give it first-strike options. See Sari Arho Havrén, "China's No First Use of Nuclear Weapons Policy: Change or False Alarm?" RUSI, October 13, 2023, <https://www.rusi.org/explore-our-research/publications/commentary/chinas-no-first-use-nuclear-weapons-policy-change-or-false-alarm>; and Tong Zhao, "Underlying Challenges and Near-Term Opportunities for Engaging China," *Arms Control Today*, January/February 2024, <https://www.armscontrol.org/act/2024-01/features/underlying-challenges-and-near-term-opportunities-engaging-china>.
- 49 Hans M. Kristensen, Matt Korda, Eliana Johns, and Mackenzie Knight, "'Nuclear Notebook 2024: Nuclear Arsenals of the World,'" *Bulletin of the Atomic Scientists*, <https://thebulletin.org/nuclear-notebook/>. Pentagon figures put the number above 600 as of mid-2024: U.S. Department of Defense, *2024 Military and Security Developments Involving the People's Republic of China*, December 2024, <https://media.defense.gov/2024/Dec/18/2003615520/-1/-1/0/MILITARY-AND-SECURITY-DEVELOPMENTS-INVOLVING-THE-PEOPLES-REPUBLIC-OF-CHINA-2024.PDF>, ix
- 50 U.S. Department of Defense, *2022 Military and Security Developments Involving the People's Republic of China*, November 2022, <https://media.defense.gov/2022/Nov/29/2003122279/-1/-1/1/2022-MILITARY-AND-SECURITY-DEVELOPMENTS-INVOLVING-THE-PEOPLES-REPUBLIC-OF-CHINA.PDF%20>; and U.S. Department of Defense, *2023 Military and Security Developments Involving the People's Republic of China*, October 2023, <https://media.defense.gov/2023/Oct/19/2003323409/-1/-1/1/2023-MILITARY-AND-SECURITY-DEVELOPMENTS-INVOLVING-THE-PEOPLES-REPUBLIC-OF-CHINA.PDF>.
- 51 Robert Peters and Andrew J. Harding, "Advantage over Parity: Assessing China's Expanding Nuclear Arsenal," Heritage Foundation, June 6, 2024, <https://www.heritage.org/sites/default/files/2024-06/BG3836.pdf>.
- 52 Greg Hadley, "China Now Has More ICBM Launchers than the U.S.," *Air and Space Forces Magazine*, February 7, 2023, <https://www.airandspaceforces.com/stratcom-china-more-icbm-launchers-than-us-not-more-missiles-warheads/>.
- 53 Bill Gertz, "China Building New Generation of Mobile ICBMs," *Washington Times*, March 6, 2024, <https://www.washingtontimes.com/news/2024/mar/6/exclusive-china-building-new-generation-of-mobile-/>.
- 54 "World Nuclear Forces," *SIPRI Yearbook 2024*.

not, then China's land-based strategic missile force would have a massive numerical advantage, even as Beijing continues to produce more nuclear weapons.

Considering China's swift sprint toward parity or beyond, it is unsurprising that it is rejecting U.S. calls to join an arms control process that could impede it from reaching or exceeding the military and reputational milestone of peer status as a nuclear superpower. Indeed, China expresses this openly. Its longstanding position is that it will participate in nuclear arms control talks only when it is on the same level as the two existing nuclear superpowers. As a Chinese spokesman recently explained, "China's nuclear strength is far from being on par with the U.S. and Russia. The time is not ready yet for [Beijing] to join the nuclear arms control negotiations proposed by some."⁵⁵ In other words: "When we catch up, then maybe we can talk."

For Russia, the issue is preserving or expanding the nuclear edge it already has. According to the same FAS experts, Moscow has nearly 700 more nuclear weapons (deployed and in operational reserve) than Washington: 4,380 versus 3,708.⁵⁶ This estimate is highly uncertain, particularly regarding the number of weapons Russia has for substrategic systems that have never been subject to arms control verification.⁵⁷ There is a plausible case that the Russian nuclear advantage over the United States may be much larger.⁵⁸ Whatever the true size of Russia's numerical edge, however, it is hard to see any advantages Moscow could gain from negotiating mutual limits with Washington.

Even putting aside uncertainties about the total size of the Russian nuclear arsenal, the operational realities are far more lopsided in Russia's favor than the FAS numbers suggest. In terms of operational deployments, the FAS experts have assessed that Russia and the United States deploy roughly the same number of nuclear weapons. This is extremely misleading, however, because it is based on a counting methodology that discounts numerous Russian weapons in forward storage locations. These are available to deploy quickly on often-cocated substrategic systems, but nevertheless are not counted as deployed. If these are included, Russia has roughly twice the number of deployed and quickly deployable nuclear forces. By any standards, that is a commanding nuclear edge (again, assuming Russia does not have even more).

55 Chinese Washington embassy spokesman Liu Pengyu, as quoted by Jay Solomon, "China Rejects Nuclear Talks with the U.S. as It Looks to Strengthen Its Own Arsenal," *Semafor*, June 9, 2023, <https://www.semafor.com/article/06/08/2023/china-rejects-nuclear-talks-us>.

56 Kristensen et al., "Nuclear Notebook 2024."

57 Ibid., Table 1, Russian Nuclear Forces, 2024, footnote a.

58 See, for example, Mark B. Schneider, "The 2024 Edition of the Federation of American Scientists' Report on Russian Nuclear Weapons: Flaws and Fallacies," National Institute for Public Policy, May 20, 2024, https://nipp.org/information_series/mark-b-schneider-the-2024-edition-of-the-federation-of-american-scientists-report-on-russian-nuclear-weapons-flaws-and-fallacies-no-587-may-20-2024/; and Chris Hughes, "Leaked Docs Reveal Russia Is Top Global Nuclear Threat—With Four Times Size of U.S. Nuke Arsenal," *Mirror*, June 6, 2024, <https://www.mirror.co.uk/news/world-news/leaked-russia-memo-hints-putin-32976197>.

Where rough parity likely exists is in the subcategory of operationally deployed strategic offensive forces that New START still limits, albeit temporarily and without verification. It is unknown whether Russia plans to preserve this strategic parity once New START expires in February 2026. If it chooses, Moscow has the wherewithal to swiftly and sizably boost strategic deployments. Like the United States, it has thousands of stored weapons not counted by New START, sufficient fissile materials to produce thousands more, and ample spare strategic delivery capacity. Without new arms control constraints, Russia could grow the size of its deployed nuclear arsenal far beyond the commanding overmatch it already enjoys.

Total arsenal sizes do not tell the whole story of the current tripolar nuclear balance. Both Russia and China greatly overmatch the United States in the subcategory of substrategic nuclear forces—the short-, medium-, and intermediate-range systems most likely to be used first in a war. The United States has 200 tactical nuclear weapons. These are all old-school B-61 gravity bombs carried underneath F-15, F-16, and F-35 multirole fighter jets.⁵⁹ One hundred of these are forward located in NATO countries ready to quickly deploy, and the rest are stored in the United States.⁶⁰ The United States does not possess any intermediate-, medium- or short-range nuclear missile systems.⁶¹ As a point of comparison, Pakistan has roughly the same number of substrategic weapons, and most of these are for modern land- and sea-based missiles.⁶² Put bluntly, U.S. substrategic capabilities are far less formidable than even a small nuclear power like Pakistan.

In contrast, Russia is thought to have almost 2,000 substrategic weapons with varying yields that can be used on a variety of air-, sea-, and ground-based systems with deliveries from short to intermediate range.⁶³ These include new mobile intermediate-range GLCMs (until recently banned by the INF Treaty), the world's only air-launched ballistic missile (a medium-range nuclear-capable hypersonic missile that can be carried by multirole fighters), and various shorter range missiles. These unclassified estimates are very uncertain, so the disparity could be greater. For example, the Ukrainian military reportedly believes Russia

59 These venerable bombs dating back to the early 1960s are being upgraded, including to improve accuracy, as part of an ongoing life extension program through 2026. See Aaron Mehta, “U.S. to Introduce New Nuclear Gravity Bomb Design: B61-13,” *Breaking Defense*, October 27, 2023, <https://breakingdefense.com/2023/10/us-to-introduce-new-nuclear-gravity-bomb-design-b61-13/>. The new warhead variant is needed to provide “additional options against certain harder and large-area military targets,” according to the Pentagon.

60 Although not assigned to NATO, France also has about 50 substrategic nuclear weapons delivered by medium-range air-launched cruise missiles carried by Rafale fighter-bombers.

61 Kristensen et al., “Nuclear Notebook 2024.”

62 Ibid.

63 “What are Tactical Nuclear Weapons?” FAS estimates (Kristensen et al., “Nuclear Notebook 2024”) are somewhat lower at 1,558, but FAS indicates this number is highly uncertain.

has 10,000 tactical nuclear weapons.⁶⁴ In any case, Putin is promising to produce and deploy more IRBMs against U.S. allies in Europe and Asia.⁶⁵

China may have as few as 128 substrategic weapons, though this estimate is also highly uncertain. Most of these, however, are for modern IRBMs, and Beijing has hundreds more nuclear-capable IRBMs it can arm as it produces more nuclear warheads.⁶⁶ This implies Beijing's arsenal of intermediate-range nuclear forces is likely to grow as more of these IRBMs are armed with nuclear weapons. Given that the United States and its allies deploy no tactical to intermediate-range nuclear forces in Asia, this would be a significant and growing Chinese overmatch in any regional conflict scenario.

The Russian and Chinese advantages in substrategic nuclear forces could be valuable to them as coercive tools to dissuade the United States and its allies from intervening against military aggression against their neighbors. Russia has been doing this in conjunction with its invasion of Ukraine. This is why the balance of substrategic nuclear forces can matter so much in the context of a regional conflict. Because these systems are seen as war-fighting weapons, they offer a more credible threat of nuclear escalation. Recently revised Russian doctrine envisions being the first to escalate to tactical nuclear weapons in a variety of scenarios, including where it is the aggressor as in Ukraine.⁶⁷ This role of substrategic weapons is likely to increase in value for Moscow as a means to offset conventional vulnerabilities as its forces are degraded in the Ukraine War. Russia has already been successful in using nuclear coercion—leveraging the credible threat implied by its substrategic overmatch—to induce caution by the United States and its allies in terms of how far they are willing to go to enable Ukraine to defeat Russian aggression.

Given Russian successes at threatening nuclear escalation to constrain U.S. intervention in Ukraine, it is easy to imagine that China might emulate this technique should it decide to take military action against Taiwan. This option would be especially tempting if it still boasts a regional substrategic overmatch against the United States and its Asian allies.

Numerical balances—whether overall or pertaining to strategic or substrategic subcategories—still do not give a complete picture of the tripolar nuclear balance. Things are even worse for Washington than the numbers suggest. Unlike the United States, Russia and China

64 Hughes, “Leaked Docs.”

65 David E. Sanger and Anton Troianovski, “Putin Vows to Make New Nuclear Missiles and to Weigh Placing Them Near NATO Nations,” *New York Times*, June 28, 2024, <https://www.nytimes.com/2024/06/28/world/europe/russia-nuclear-missiles-nato.html>.

66 Kristensen et al., “Nuclear Notebook 2024.” See especially Table 1, Chinese Nuclear Forces, including footnotes f, g, and o.

67 See, for example, Heather Williams, “Why Russia Is Changing Its Nuclear Doctrine Now,” Center for Strategic and International Studies, September 27, 2024, <https://nuclearnetwork.csis.org/why-russia-is-changing-its-nuclear-doctrine-now/>; and William Alberque, “Russian Military Thought and Doctrine Related to Nonstrategic Nuclear Weapons: Change and Continuity,” International Institute of Strategic Studies, January 22, 2024, <https://www.iiss.org/research-paper/2024/01/russian-military-thought-and-doctrine-related-to-nonstrategic-nuclear-weapons/>.

are developing and deploying exotic new types of nuclear delivery systems. These emerging capabilities could alter the nuclear balance in unpredictable ways.

Russia is far along in developing and deploying an array of exotic nuclear delivery systems that could reshape the strategic equation. These include the Poseidon autonomous intercontinental-range nuclear torpedo (widely referred to as the “tsunami apocalypse torpedo”), the Burevestnik intercontinental-range nuclear-powered and -armed cruise missile (a system that could allow unlimited global range and loitering), and possibly a nuclear-armed anti-satellite weapon. It is also in the process of deploying the new RS-28 Sarmat “Satan-2” ultraheavy ICBM, the largest nuclear missile ever. This monster reportedly can carry a whopping 10–16 MIRVs.⁶⁸ These new delivery systems could allow Russia to deploy the thousands of reserve warheads it has in storage and dramatically boost its strategic deployments. The United States has nothing in its current or planned arsenal that approximate any of these novel systems.

There is an entirely new class of weaponry that many countries are racing to develop: maneuverable hypersonic vehicles (MHVs). This technology could transform long-range precision strikes by combining the speed of a ballistic missile with the maneuverability and low-altitude flight characteristics of a cruise missile. This could complicate early warning and require entirely new missile defense technologies.⁶⁹ Moscow, Beijing, and Washington are at the forefront of the race to develop MHVs up to intercontinental ranges. However, only Russia is actively deploying them as nuclear delivery systems. If this works, it could radically tilt the strategic nuclear offense–defense advantage toward offense in the same way that the advent of heavy ICBMs and MIRVs did in the 1970s.

This technology is still fledgling, and its operational capabilities remain mostly unproven. Russia appears to be making significant strides, however. In 2023, it announced the first operational deployments of Avangard, a nuclear-capable MHV specifically designed for ICBMs and SLBMs.⁷⁰ The new ultraheavy Satan-2 ICBM reportedly is designed to carry

68 See, for example, Silky Kaur, “One Nuclear-Armed Poseidon Torpedo Could Decimate a Coastal City: Russia Wants 30 of Them,” *Bulletin of the Atomic Scientists*, June 14, 2023, <https://thebulletin.org/2023/06/one-nuclear-armed-poseidon-torpedo-could-decimate-a-coastal-city-russia-wants-30-of-them/>; Timothy Wright, “Russia Claims to Have Tested Nuclear-Powered Cruise Missile,” *International Institute of Strategic Studies*, October 13, 2023, <https://www.iiss.org/online-analysis/missile-dialogue-initiative/2023/10/russia-claims-to-have-tested-nuclear-powered-cruise-missile/>; “Missile Threat: RS-28 Sarmat,” *Center for Strategic and International Studies*, April 23, 2024, <https://missilethreat.csis.org/missile/rs-28-sarmat/>; and Theresa Hitchens, “New Details Emerge of Russia’s Potential Nuclear Space Weapon,” *Breaking Defense*, May 3, 2024, <https://breakingdefense.com/2024/05/new-details-emerge-of-russias-potential-nuclear-space-weapon/>.

69 Theresa Hitchens, “First Test of Space-Based Hypersonic Tracking Sensors ‘Within a Week,’ MDA Director Says,” *Breaking Defense*, June 6, 2024, <https://breakingdefense.com/2024/06/first-test-of-space-based-hypersonic-tracking-sensors-within-a-week-mda-director-says/>.

70 “Russia Loads Missile with Nuclear-Capable Glide Vehicle into Launch Silo,” *Reuters*, November 16, 2023, <https://www.reuters.com/world/europe/russia-installs-one-more-hypersonic-nuclear-missile-ifax-2023-11-16/>.

three of these nuclear MHVs.⁷¹ If these programs perform as advertised and are deployed at scale, Russia could be poised to achieve peerless strategic offensive nuclear strike capabilities unless China or the United States follows suit. The Defense Intelligence Agency has assessed that China intends do so by using the intercontinental-range MHV it is developing for nuclear missions.⁷²

China appears to have surprised both Washington and Moscow by developing and successfully testing a fractional orbital bombardment system (FOBS) capable of delivering MHVs. A FOBS is a missile in low orbit that can suddenly deorbit using a retrograde rocket. If successful and deployed at scale with nuclear-armed MHVs, this Chinese hybrid of two novel capabilities could offer a global short-warning nuclear strike capability unlike anything hitherto seen in the nuclear age. If successful, such a nuclear FOBS-MHV system would severely challenge existing early warning and missile defense technologies.⁷³ China denies any such intention, but the potential is there.

As with these Chinese denials, capabilities are one thing, but there is also the question of intent. For example, Russia may not have gained nuclear dominance because it intends to act as a nuclear bully. After all, to a considerable extent Russia's nuclear buildup may have been prompted by genuine fears that the United States was pursuing missile defense technologies that could undermine the credibility of its strategic deterrent. Many experts see the U.S. decision more than 20 years ago to withdraw from the ABM Treaty as planting the seeds for the renewal of great power nuclear competition. As one former State Department arms control official has opined, "What we're seeing now is a long-delayed but direct consequence of our pulling out of ABM. This set Russia on its current course, exploring novel technologies that are now just coming to fruition."⁷⁴ It is conceivable that similar fears could explain why China has abandoned decades of nuclear restraint.

This narrative describes an action-reaction cycle triggered by the United States. It implies Americans may have only themselves to blame for today's perilous nuclear landscape. This is probably at least partially true—and for purposes of this analysis, it is beside the point. Whatever its initial motive, Russia has gained and is expanding a nuclear edge over the United States. What matters in terms of arms control incentives is that the Kremlin now openly relishes this dominance.

71 RS-28 Sarmat Satan 2 II SS-X-30 ICBM, Global Defense News Army Recognition Group, May 16, 2024, <https://www.armyrecognition.com/military-products/army/missiles/icbm-intercontinental-ballistic-missiles/rs-28-sarmat-satan-ii-ss-x-30-icbm-silo-based-intercontinental-ballistic-missile-data>.

72 "Nuclear Challenges: The Growing Capabilities of Strategic Competitors and Regional Rivals," Defense Intelligence Agency, 2024. https://www.dia.mil/Portals/110/Images/News/Military_Powers_Publications/Nuclear-Challenges-2024.pdf.

73 Sidharth Kaushal and Sam Cranny-Evans, "China's New Hypersonic Capability," RUSI, October 26, 2021, <https://rusi.org/explore-our-research/publications/commentary/chinas-new-hypersonic-capability>; and Theresa Hitchens, "It's a FOBS, Space Force's Saltzman Confirms amid 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/>.

74 Interview with Rich Davis.

Russian glee at having seized the nuclear whip hand is plain to see. Putin and his top officials often boast about Russia's advantage in substrategic nuclear weapons and about having mightier and more modern strategic forces against which the United States and its allies have no defenses.⁷⁵ This nuclear swagger may be behind Russia's increasing willingness to engage in overt nuclear coercion.⁷⁶ Although most of Russia's recent nuclear saber rattling has focused on the threat to use substrategic weapons against Ukraine, Putin and other top officials have also threatened to respond to increasing intervention by the United States or other NATO countries with direct nuclear strikes against them.⁷⁷ If anything, Russian nuclear bravado has been escalating in recent months. For example, a top Kremlin propagandist declared on state-owned television: "Nuclear war is inevitable.... Let's compare whose strategic weapons are bigger!"⁷⁸ Not to be outdone, Dmitry Medvedev, deputy chairman of the Russian Security Council and former president and prime minister, warned that Americans should fear Russia's nuclear might: "Let their entire elite worry! Let them tremble and shake, you nits!"⁷⁹

Despite Russia's nuclear buildup and escalation of naked nuclear belligerence, many prominent strategic analysts have argued there is no need for the United States to engage in nuclear competition just because Russia has gained a nuclear advantage and is rattling the nuclear saber. Their argument is that a Russian (or prospective Chinese) nuclear edge does not undercut America's strategic deterrent because U.S. nuclear forces are still sufficient to threaten mutual assured destruction (MAD), especially if Washington goes back to targeting cities.⁸⁰ The implication for purposes of this study is that, although Washington may not have much leverage to achieve arms control, this does not matter as long as MAD prevails.

75 See, for example, Ray Sanchez, "Putin Boasts Military Might with Animation of Florida Nuke Strike," *CNN*, March 2, 2018, <https://www.cnn.com/2018/03/01/europe/putin-nuclear-missile-video-florida/index.html>; and "Putin Boasts Russia Nuclear Arsenal Better than in U.S.," *Barrons*, March 13, 2024, <https://www.barrons.com/news/putin-says-foreign-troops-would-not-help-ukraine-on-battlefield-3c492674>.

76 For an in-depth exploration of the role nuclear weapons may be playing to embolden Russian military adventurism, see David A. Cooper, "Has the Forgotten 'Stability–Instability Paradox' Belatedly Reared Its Ugly Head in Ukraine?" *Orbis*, 67, no. 1, 2023, <https://www.sciencedirect.com/science/article/abs/pii/S0030438722000795>.

77 Anton Troianovski, "Putin Says West Risks Nuclear Conflict If It Intervenes More in Ukraine," *New York Times*, February 29, 2024, <https://www.nytimes.com/2024/02/29/world/europe/putin-speech-ukraine-nuclear-conflict.html>.

78 Vladimir Solovyov, as quoted by Rachel Dobkin, "Putin Ally Insists 'Nuclear War Is Inevitable,'" *Newsweek*, May 26, 2024, <https://www.newsweek.com/vladimir-solovyov-nuclear-war-inevitable-russia-ukraine-1904833>. For more information on Solovyov, see "Faces of Kremlin Propaganda: Vladimir Solovyov," U.S. Department of State, March 31, 2022, <https://www.state.gov/disarming-disinformation/faces-of-kremlin-propaganda/vladimir-solovyov/>.

79 As quoted by Hugh Cameron, "Putin Ally Rejects Nuclear Talks: U.S. Must 'Tremble and Shake,'" *Newsweek*, June 21, 2024, <https://www.newsweek.com/medvedev-putin-nuclear-weapons-us-start-talks-1915681>.

80 See, for example, Keir Lieber and Daryl G. Press, "U.S. Strategy and Force Posture for an Era of Nuclear Tripolarity," Atlantic Council, May 1, 2023, <https://www.atlanticcouncil.org/in-depth-research-reports/issue-brief/us-strategy-and-force-posture-for-an-era-of-nuclear-tripolarity/>; Ankit Panda, "We Are Sleepwalking into a New Nuclear Arms Race," *The New Republic*, October 24, 2023, <https://newrepublic.com/article/176118/new-nuclear-arms-race-washington>; and Charles L. Glaser, James M. Acton, and Steve Fetter, "The U.S. Nuclear Arsenal Can Deter Both China and Russia," *Foreign Affairs*, October 25, 2023, <https://www.foreignaffairs.com/ united-states/ us-nuclear-arsenal-can-deter-both-china-and-russia>.

This minimal deterrence argument is true as far as it goes. Moscow's current and foreseeable nuclear edge would not give it a sufficient first-strike punch to prevent U.S. retaliatory strikes massive enough to efface Russian society. However, there are at least two glaring issues with this line of thinking. First, it is disingenuous to the extent that most of those arguing for it also claim there is an urgent need for arms control. If minimal deterrence suffices, then arms control would not be necessary. If on the other hand arms control is needed, or at least very helpful, then the central question remains: Can this realistically be achieved if there is a lopsided and growing nuclear imbalance against the side calling for arms control? Second, minimal deterrence may be sufficient to deter an attack on the American homeland, but that is far from everything the United States wants to deter. There is a compelling case that Russia's nuclear advantage at the substrategic level may be emboldening Putin's military adventurism in Ukraine and elsewhere.⁸¹ This is consistent with past findings that nuclear advantage correlates with political victory in nuclear crises because it tilts the balance of resolve toward the superior side.⁸² All of this suggests that, even if MAD is sufficient to deter a nuclear first strike or conventional attack against the American homeland, it may not be sufficient for extended deterrence to protect U.S. allies and interests or to prevent escalation to substrategic nuclear weapons should extended deterrence fail. Those making the case for minimal deterrence need to address these issues.

The sufficiency of a minimal deterrent for MAD versus the necessity for robust deterrence along a ladder of escalation is the great debate of deterrence theory. This has been the main cleavage between nuclear hawks and doves for decades. For purposes of this analysis of arms control incentives, however, it hardly matters which side is correct. What matters is what Russian (and perhaps soon Chinese) leaders believe about the implications of having nuclear superiority. The effectiveness of nuclear deterrence, or its evil twin nuclear coercion, depends not only on relative capabilities but also on the perceptions of those being deterred or coerced and those doing the deterring and coercing. If Russian leaders believe their nuclear edge matters, or even if they are pretending to believe this and bluffing to good effect, then they will prize it. Moreover, a nuclear edge that exists alongside a worsening conventional military disadvantage—not the case for China, but inarguably the Russian situation—will be even more valued.

With Russia in the nuclear catbird seat and China dashing for parity or more, it is intuitive why arms control holds little appeal for either, especially Russia. The core aim of traditional superpower nuclear arms control is to provide for stable and predictable mutual deterrence—otherwise known as a stalemate. This may or may not involve reductions, which may be symmetric or asymmetric, but stability through a rough strategic balance is the aim.

81 Cooper, "Forgotten 'Stability–Instability Paradox.'"

82 Matthew Kroenig, "Nuclear Superiority and the Balance of Resolve: Explaining Nuclear Crisis Outcomes," *International Organization*, 67, no. 1, January 2013. These findings are not uncontested; see, for example, Lauren Sukin, "When Nuclear Superiority Isn't Superior: Revisiting the Nuclear Balance of Power," Carnegie Endowment for International Peace, October 17, 2023, <https://carnegieendowment.org/research/2023/10/when-nuclear-superiority-isnt-superior-revisiting-the-nuclear-balance-of-power?lang=en>.

Strategic rivals will always, however, prefer advantage over stalemate if they believe it is attainable and sustainable. A potential wildcard therefore would be if Russian or Chinese leaders ever come to believe that attaining (for China) or preserving or expanding (for Russia) nuclear advantage is unsustainable or unaffordable over the longer term. This introduces another key aspect of the relative nuclear advantage equation: comparative timelines and costs.

Here too, Russia and China seem to have the clear advantage. Whereas Russia's nuclear modernization and buildup is in its late phases and China's modernization and buildup is in midphase, U.S. modernization (without any meaningful buildup) is still nascent. After decades of not modernizing, replacing senescent systems left over from the Cold War is no longer optional if the United States is to remain a first-tier nuclear power. The U.S. plans to replace most of its aging nuclear systems, including most bombers and all ballistic missile submarines (SSBNs) and ICBMs. However, Washington has a long and expensive way to go just to remain in place. The B-21 stealth bomber is farthest along, with the first aircraft undergoing flight tests, but the planned fleet will not be fully deployed until the mid-2030s and these newest strategic bombers may need to be replaced by a next-generation system soon thereafter.⁸³ The first *Columbia*-class SSBN is under construction, but the program has had delays and cost overruns. These subs will carry the vast majority of U.S. strategic weapons—in part because only America's SLBMs are MIRVed—and the new system is absolutely essential to maintaining the longstanding American qualitative edge in SSBNs. Optimistically, the first *Columbia* deployment will not happen until 2031 or later. Assuming no further delays, it will take until 2040 to fully replace the aging *Ohio* class.⁸⁴ Meanwhile, the Sentinel ICBM is still in early development and faces congressional scrutiny for major cost overruns and uncertain delivery schedules.⁸⁵ In other words, the United States plans to spend the next 15 years running hard just to stay in place as a nuclear superpower.

This analysis has attempted to extrapolate Chinese and Russian incentives for pursuing arms control in today's evolving nuclear landscape. The upshot is that, if the United States stays focused on just staying put, then China and Russia will continue to have good reasons to prefer a lopsided arms race, in which they like their odds of coming out ahead, over negotiating an equitable arms control stalemate. If China thinks it can achieve parity or more without arms control, and if Russia believes it can hold or grow its advantage, then those would be positive outcomes for them without arms control. It might be a very different story,

83 John A. Tirpak, "Allvin: USAF Sticking to 100 B-21s as It Considers Something New," *Air & Space Forces Magazine*, April 16, 2024, <https://www.airandspaceforces.com/air-force-b-21-stealth-bomber/>.

84 "Columbia-Class Ballistic Missile Submarines," U.S. Navy Technology, June 23, 2023, <https://www.naval-technology.com/projects/columbia-class-ballistic-missile-submarines/?cf-view>; and Maya Carlin, "The U.S. Navy's Columbia-Class Submarine Nightmare Is Just Getting Started," *The National Interest*, April 11, 2024, <https://nationalinterest.org/blog/buzz/us-navys-columbia-class-submarine-nightmare-just-getting-started-210521>.

85 James McCue, "Congress Should Save the Sentinel ICBM—Its True Value Is More than Simply Its Cost," Atlantic Council, May 21, 2024, <https://www.atlanticcouncil.org/blogs/new-atlanticist/congress-should-save-the-sentinel-icbm-its-true-value-is-more-than-simply-its-cost/>.

however, if Washington were to pivot and decide to give them a run for their money with a dual-track arms race.

Given the precarious Russian economy, Moscow could find it particularly difficult to preserve a significant nuclear edge were Washington to take steps to narrow the gap. Russian military spending is already just shy of 6 percent of gross domestic product (GDP), versus less than 3.5 percent for the United States. Recent congressional calls to boost U.S. military spending to 5 percent of GDP would still leave Washington tapping less of its economy than Russia.⁸⁶ More importantly, because the American economy dwarfs Russia's, any U.S. spending increases relative to GDP would swamp Russia in absolute terms. Additionally, just as in the Cold War, Russia would face a geographic disadvantage if NATO countries boost substrategic deployments. All of this could make arms control start to look like a safer and cheaper bet for the Kremlin than going toe to toe with the first American nuclear buildup since the Cold War.

China's situation is much more favorable. Because the Chinese economy has been growing strongly for decades, it has been able to significantly boost military spending while keeping it at or below 2 percent of GDP. Nevertheless, there are uncertainties about Beijing's relative economic wherewithal to compete with Washington in a contested nuclear arms race. Assessments by leading think tanks have suggested China is underreporting its military spending, meaning it may have less room to grow than it appears.⁸⁷ There is also a lively debate about whether the Chinese economy is experiencing a temporary blip in growth or heading for a sustained slowdown or downturn that could constrain budgets against an across-the-board military buildup. If this transpires, China could be forced to make difficult spending tradeoffs between nuclear and conventional military priorities.

Despite these uncertainties, it is a safe bet that Beijing is in a much stronger economic position than Moscow to compete against Washington in a long-term nuclear arms race. Russia is the biggest immediate nuclear challenge for the U.S., but China is the pacing threat for the decades ahead. If Washington starts to arms race, however, China would find itself playing catchup from a substantial capability deficit. Despite good prospects for achieving a quantitative and qualitative lead on ICBMs, Beijing still lags numerically and technologically in other areas, including SSBNs, long-range stealth bombers, and missile defense.⁸⁸ Like Russia, it would face a geographic disadvantage if the United States deployed intermediate-range nuclear missiles in Asia.

86 Valerie Insinna, "5% GDP: Top SASC Republican Pitches Dramatic Jump in Defense Spending, \$55B More in FY25," *Breaking Defense*, May 29, 2024, <https://breakingdefense.com/2024/05/5-gdp-top-sasc-republican-pitches-dramatic-jump-in-defense-spending-55b-more-in-fy25/>.

87 China Power, "What Does China Really Spend on Its Military?," Center for Strategic and International Studies, <https://chinapower.csis.org/military-spending/>.

88 That said, the technological lead on some pertinent emerging technologies—for example MHVs, antisatellite weapons, and artificial intelligence—is up for grabs.

It would be difficult for China to overcome its overall numerical deficit in an active arms race with the United States, even in a rosy economic scenario. If the Pentagon's unclassified estimates are accurate, and if China can sustain the pace of its current nuclear buildup, then it is still at least a decade away from parity with current U.S. nuclear deployment levels. Achieving this would still leave Beijing far from overall nuclear parity, given that the United States has thousands of reserve warheads. If Washington started to deploy those reserves and used its large reserve stockpile of fissile materials to start building more, China would be hard pressed to catch up. If Beijing became convinced that Washington was serious about denying it an uncontested path to parity—and that by seeking parity or superiority through arms racing Beijing risked a widening nuclear disadvantage—then trying to achieve parity through an equitable arms control arrangement might begin to look like an option worth exploring.

For more than a decade, Moscow and China have enjoyed a free ride by nuclear arms racing against the United States without the United States arms racing back. But if Washington did decide to arms race back, each of these rivals would face strong headwinds: a yawning economic disadvantage for Russia, and a sizeable lag in current nuclear capabilities for China. All of this is of course hypothetical, because the United States has not decided to arms race back. Nonetheless, this analysis suggests there is good reason to hope that by doing so, Washington could bend Russian and Chinese incentives in favor of arms control as an alternative to arms racing. This is the essence of the case for why Washington should pivot to a dual-track arms control strategy.

CHAPTER 4

Elements of an Effective Dual-Track Strategy

The preceding chapter made the case for why Washington should shift to a dual-track approach in pursuit of nuclear arms control deals with China and Russia. This chapter explores what a successful dual-track strategy might look like. Key elements include garnering durable domestic political support; developing a feasible set of levers to incentivize China and Russia to come to the nuclear bargaining table; and promulgating a plausible arms control framework that would achieve a stable, predictable, and verifiable three-way nuclear balance.

A Goldilocks Recipe for Domestic Political Support

The leverage and arms control recommendations that follow are not the only elements of a successful dual-track formula. An effective dual-track strategy must be a two-level game in which building and sustaining domestic political support is a crucial element of success.⁸⁹

The notion of arms racing toward arms control is a tough sell across the ideological spectrum of domestic politics. Dual-track logic triggers reflexive skepticism by doves and hawks alike, albeit for nearly opposite reasons. To be effective, a dual-track strategy therefore must be calibrated to achieve leveraging effects on China and Russia while minimizing predictable concerns from the ideological poles to gain support from a sufficiently wide swath of the American ideological center.

The first imperative along these lines is to communicate what a dual-track approach is and is not. This means conveying that a smartly conceived dual-track strategy is just that: a deliberate strategy with defensible and achievable ends, ways, and means. It is neither rushing

89 For the classic exploration of this dynamic, see Robert D. Putnam, "Diplomacy and Domestic Politics: The Logic of Two-level Games," *International Organization* 42, no. 3, Summer 1988, <https://doi.org/10.1017/S0020818300027697>.

heedlessly into a full-tilt race for nuclear supremacy nor fecklessly accepting at all costs whatever arms control scraps may be on offer. Rather, it is a long-term strategy that seeks:

- ends: achieving verifiable and enforceable treaties that stabilize mutual deterrence among the United States and its two primary nuclear rivals without putting it at any significant disadvantage,
- ways: gaining leverage to impel trilateral arms control negotiations and positive negotiating outcomes, and
- means: pursuing coordinated and interlocking military (weapons programs and deployments) and diplomatic (arms control proposals and public diplomacy) levers of pressure.

The logic of this strategy and its history of success needs to be explained in clear and simple terms to the American people and their congressional representatives. This includes explaining it is a pragmatic middle path between accepting disadvantage to avoid arms racing and arms racing to achieve nuclear advantage. Of course, this means accepting it will never appeal to the ideological poles.

The staunchest doves will reflexively object to building new nuclear weapons even for a good reason. Moreover, they will not see pursuing deterrence-centric arms control as a particularly good reason. Instead, they will dismiss the goal of promoting a stable three-way nuclear balance as woefully inadequate because they believe only deep disarmament can save humanity from nuclear obliteration. They will stay true to this cause by pinning their hopes on promoting universal nuclear abolition through quixotic means like the United Nations Nuclear Ban Treaty.

Meanwhile, the staunchest hawks will reflexively object to entrusting national security to pieces of paper signed by rapacious and untrustworthy autocratic rivals. They too will dismiss pursuing a three-way nuclear balance as woefully inadequate, but for the opposite reason: they see achieving a nuclear edge as the best way to neutralize nuclear threats. They will pin their hopes on strengthening deterrence to the greatest extent possible by gaining offensive and defensive superiority, and then they will rely on these advantages if deterrence fails to limit the damage of fighting a nuclear war. They will stay true to this cause by resisting on principle any meaningful arms control constraints on American power and autonomy.

These competing prescriptions at the dovish and hawkish extremes are utterly irreconcilable, but the poles have a shared disinterest in the middle ground of pragmatic arms control. The best hope for building dual-track support, therefore, is to convince a sufficiently broad middle spectrum—those with temperate dovish and hawkish leanings—that this is the best Goldilocks solution to bridging their differences and pursuing achievable outcomes that each side can at least reluctantly support. This is where the details will matter for getting the proverbial porridge just right for both sides.

One critical aspect of a dual-track Goldilocks recipe is to get the most leverage for the buck. This is one of the few things that will appeal to all sides. Any exorbitant price tags, over and above the already exorbitant nuclear modernization program underway, would make it that much harder for doves to swallow the need for arms racing today for the sake of arms control tomorrow. Sticker shock could also spook another breed of hawk—deficit hawks, who may be poised to gain new sway via the incoming Trump administration’s high-profile outside advisory group, the so-called Department of Government Efficiency. Even national security hawks may worry that too big a nuclear price tag could force painful budget tradeoffs down the road between nuclear and conventional military investments. For these reasons, looking for ways to gain leverage at the lowest possible cost is an important ingredient for sustainable domestic support.

Another key Goldilocks criterion is to take into account specific dovish and hawkish concerns. Although hardcore ideologues on either side are unlikely to be won over, both camps have legitimate worries that an effective dual-track strategy can and should try to mitigate.

The top dovish fear is that steps intended to gain leverage could instead trigger spiraling action-reaction arms racing that makes a bad situation worse. Such fears are even more understandable in a tripolar nuclear landscape that promises to unleash much more complex dynamics than the straightforward dyadic rivalry of the Cold War. For example, dovish arms control advocate Daryl Kimball has warned, “If Russia and the United States exceed New START limits, China undoubtedly would be tempted to accelerate its own nuclear buildup. Such an action-reaction cycle would be madness.”⁹⁰ This concern was echoed by senior Biden administration officials as reasons why they were wary of boosting nuclear deployments.⁹¹

Hawks, meanwhile, argue action-reaction fears are overblown. They worry this rationale is too often used as an excuse for not responding even when rivals are already arms racing. Such skeptics often point to a wry observation that Defense Secretary Harold Brown made in 1979 about the Soviets: “When we build, they build; when we cut, they build.”⁹² It is easy to see why hawks perceive exactly this situation in the current Russian and Chinese buildups.

These competing views on action-reaction arms racing will not be resolved here. A savvy dual-track strategy can, however, play a helpful role in bridging these differences. The pragmatic argument for centrist doves is that dual tracking is the best way to build domestic support and international momentum for some kind of arms control, and this is better

90 Kimball, “Breaking the Impasse.”

91 See, for example, Austin, “Remarks;” and Jake Sullivan, “Remarks by National Security Advisor Jake Sullivan for the Arms Control Association (ACA) Annual Forum,” The White House, 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/>.

92 Harold Brown, in a statement before a joint meeting of the House and Senate Budget Committees in early 1979 regarding the fiscal 1980 budget. <https://www.bartleby.com/lit-hub/respectfully-quoted/harold-brown-1927/>.

than nothing. The pragmatic argument for centrist hawks is that dual tracking is the best way to build domestic support for some kind of nuclear buildup beyond current modernization plans, and this is better than nothing. Seeds of this type of pragmatism are already sprouting here and there. Some centrist doves are conceding the need to respond to the ongoing Russian and Chinese nuclear buildups.⁹³ Some hawks who believe action-reaction concerns have been overblown in the past are conceding that today's tripolar complexities could make this a more valid worry going forward.⁹⁴

The Goldilocks imperative is to chart a course between the dovish impulse to accept nuclear disadvantage and the hawkish impulse to seek nuclear superiority. The trick is for a dual-track strategy to articulate that the United States is not seeking nuclear dominance, yet it will not concede a significant nuclear edge to its rivals by falling too far behind. If suspicious geostrategic rivals (or domestic doves) worry this is merely a ruse for dominance, proposing arms control arrangements for a three-way nuclear balance will help to show otherwise.

Understandably, some wary doves mistrust dual-track logic as a Trojan horse for seeking nuclear dominance, arms control proposals notwithstanding. For example, disarmament scholar Nancy Gallagher has sounded the alarm that a dual-track approach “suggests that the United States must do everything in its power to regain quantitative and qualitative superiority in every strategic emerging technology and deployed weapons system.”⁹⁵ Of course, it need not suggest anything of the sort. A dual-track strategy could take such a maximalist approach; however, it need not and during the Cold War it did not.

Overcoming dovish mistrust and mitigating legitimate fears of triggering action-reaction cycles boils down to focusing on arms racing from behind. This means adopting a dual-track strategy that seeks leverage mostly by closing gaps where the United States is already at a disadvantage. This was precisely what happened in the historical examples discussed in the prior chapter: the Johnson/Nixon push to close the missile defense gap with the Soviets while pushing for ABM negotiations, the Carter/Reagan decision with NATO allies to counter Soviet IRBM deployments in Europe while calling for INF negotiations, and the Reagan strategic buildup to eliminate Soviet ICBM advantages in conjunction with START negotiations. In none of these cases was Washington arms racing for superiority; rather, it was refusing to accept being at a permanent disadvantage while it was seeking arms control that would promote strategic stability by creating a rough balance.

In the contemporary context, Washington can and should use modernization to preserve its longstanding qualitative advantages in areas like strategic bombers, SSBNs, and missile defense. These count as standing in place rather than seeking to leap ahead. However,

93 For example, members of the bipartisan Congressional Commission on Strategic Posture, such as Rose Gottemoeller and Leonor Tomero.

94 Kroenig, “Arms Racing under Nuclear Tripolarity.”

95 Nancy Gallagher, “Review of *Arms Control for the Third Nuclear Age*,” H-Diplo–ISSF Roundtable 13-9, March 24, 2022, https://issforum.org/roundtables/13-9#_Toc98402035.

any numerical increases or new types or deployments of nuclear forces should be limited to catching up from behind. Following this playbook will leave doves nervous about arms racing and hawks dissatisfied about not arms racing enough, but that is the Goldilocks recipe: neither too hot nor too cold.

One complication to tripolar arms racing from behind is that closing numerical gaps with Russia necessarily involves widening numerical leads over China. As the doves warn, if the United States and Russia get into an arms race, then China could react by ramping up its own nuclear buildup. This concern will doubtless heighten doves' anxiety about the pitfalls of a dual-track strategy involving two peer rivals. However, this anxiety is probably misplaced. If China is already in a full-speed dash for numeric parity, it may not be able to accelerate much in any case. Moreover, it cannot be ruled out that the real temptation for Beijing might be to keep dashing beyond parity, as some hawks fear. If so, knowing it faces a moving goalpost may dampen any temptation for superiority and make negotiating a tripolar balance a more attractive option. This may make doves queasy, but in the end, one can only worry so much about triggering an arms race when a rival is already arms racing.

It may be harder to win centrist doves over to a dual-track strategy than centrist hawks. A dual-track approach requires the doves to take more on trust. After all, gaining negotiating leverage comes first, and arms control may not follow. Prescribing a limited dual-track strategy that seeks to arms race inexpensively and from behind should convince some centrist doves that this is a reasonable risk to take in order to improve the chance for arms control rewards. Centrist hawks nonetheless need to appreciate that this sequencing invites natural dovish suspicions that cynical hawks would use a dual-track rationale to build domestic political support for nuclear weapons programs without any sincere intention to pursue arms control. It is crucial to allay such bait-and-switch worries, for example by obtaining up-front hawkish support for concrete arms control proposals that can be announced before or in tandem with the leverage pieces of the dual-track equation. A dual track approach will only work if centrist hawks can convince centrist doves that they are sincere about shared arms control goals.

Centrist hawks also have some natural reservations, even if they may be less serious. Arms racing on the cheap and only to narrow gaps is not a recipe for achieving the most robust deterrence possible. A partial response to hawks would be that an all-out race for nuclear advantage is unlikely to garner domestic political support. Dual-track logic, therefore, offers the best chance for a more competitive nuclear posture, even if it falls short of a muscular deterrent. Centrist hawks may harbor their own bait-and-switch fears. If the arms racing works and serious negotiations begin, doves may press to accept lopsided concessions just to get a deal, resulting in a treaty that is too flimsy to rely upon. Here too, the best way to allay such worries is to develop concrete arms control proposals up front. Hawks can use this process to stake out parameters on key issues like reciprocity, verification, and enforcement.

In summary, for a dual-track strategy to gain broad and sustainable domestic political support, it should feature limited, cost-effective arms racing tailored to narrow existing

gaps and specific arms control proposals that spell out negotiating objectives and redlines. Neither hawks nor doves in Congress or elsewhere will be thrilled by this approach, but if it is crafted and explained adroitly, centrist hawks may conclude it is the best (perhaps only) chance to stiffen the U.S. response to Chinese and Russian nuclear competition, and centrist doves may conclude it is the best (perhaps only) chance to temper this competition with negotiated guardrails.

Measured Steps to Gain Negotiating Leverage

What might a limited and cost-effective arms race from behind entail? Various cost-effective steps are available that would narrow the numerical, system (type), and deployment gaps with Russia and China. Some of these options would not even require developing or deploying expensive new nuclear systems right away. Drawing on the INF experience, signaling a path that will be taken in the future, in conjunction with calls for arms control to head off that path, is sometimes an effective (and certainly cost-effective) bargaining chip. Such signals cannot, however, be bluffs, and they require follow-on steps to signal resolve and ratchet up negotiating pressure as necessary. This section describes potential elements of an initial set of levers that could be introduced in conjunction with a corresponding package of plausible and directly related arms control proposals.

First Things First: How Much Deterrence?

Before considering steps to gain negotiating leverage, one must ask: leverage for what? This analysis collides with the roiling debate about how much deterrence is enough. As noted already, some prominent strategic analysts argue current modernization-in-place plans provide a sufficient minimal deterrent despite the Chinese and Russian nuclear buildups. However, a strong countervailing sentiment is growing within the U.S. strategic community. The 2023 Congressional Commission on Strategic Posture (hereafter, the Commission) is one of two recent bipartisan, blue-ribbon groups to conclude a broad nuclear buildup is required to maintain effective deterrence against two simultaneous peer nuclear rivals.⁹⁶ Although a dual-track arms control strategy aligns more closely with such a buildup than minimal deterrence, this alignment only goes so far.

The Commission asserted the United States needs to expand its nuclear forces enough to deter simultaneous Russian and Chinese aggression rather than continuing to treat China as a lesser included contingency. This implies a dramatic increase in U.S. targeting requirements to encompass the combined Russian and Chinese nuclear arsenals. To meet these

96 Brad Roberts et al., “China’s Emergence as a Second Nuclear Peer: Implications for U.S. Nuclear Deterrence Strategy,” Center for Global Security Research at Lawrence Livermore National Laboratory, Spring 2023, https://cgsr.llnl.gov/content/assets/docs/CGSR_Two_Peer_230314.pdf; and Madelyn R. Creedon et al., “America’s Strategic Posture: The Final Report of the Congressional Commission on the Strategic Posture of the United States,” Institute for Defense Analyses, October 2023, https://www.armed-services.senate.gov/imo/media/doc/americas_strategic_posture_the_final_report_of_the_congressional_commission_on_the_strategic_posture_of_the_united_states.pdf.

needs, the Commission recommended expanding nuclear weapons production infrastructure and the number of deployed substrategic and strategic nuclear forces. This major strategic offensive buildup would include, for the near term, preparing to re-MIRV existing ICBMs and SLBMs by uploading reserve warheads from storage and, for the longer term, buying more B-21 bombers and their air-launched cruise missiles (ALCMs), *Columbia*-class SSBNs and their SLBMs, and MIRVing the future Sentinel ICBM.

How large does the nuclear buildup need to be to meet U.S. deterrence needs against two peer nuclear rivals? On this basic question, the Commission's recommendations are vague, perhaps deliberately so. Yet, it hinted at going big. If the force-sizing scenario is intended to deter simultaneous Russian and Chinese aggression, then this suggests a robust deterrence posture should provide parity or at least near parity with their total combined forces. At a minimum, it certainly suggests the U.S. would need a significantly larger nuclear force than either of them. To be clear, the Commission did not explicitly recommend double parity or even superiority over either country. However, options along this spectrum are logical implications of the Commission's analysis. If Washington decides double parity or even just an edge over each country is necessary for adequate deterrence in a two-peer nuclear threat environment, this would effectively rule out a dual-track arms control strategy.

Whereas a minimal U.S. deterrence stance of standing still or paring back would give Russia and China few incentives to negotiate to parity, as discussed in the last chapter, a more maximal deterrence posture that seeks to exceed an equal three-way balance in order to deal with their combined threat gives them even less reason to negotiate to a disadvantage. It is inconceivable that either Moscow or Beijing would consider a lopsided arms control scheme that vouchsafes anything that approaches U.S. parity with their combined forces, thereby putting each at a severe disadvantage. Doing so would be akin (but on a much larger scale) to the United States agreeing to longstanding Russian arms control demands to count the combined American, British, and French nuclear arsenals in assigning a parity balance—demands these allies have always rejected. If Washington decides it needs double parity or anything approaching it, then arms control is off the table.

The intent here is not to argue for or against some version of maximal or minimal deterrence. A double-parity nuclear posture might be prudent to ensure robust deterrence against an axis of two autocratic and openly revanchist geopolitical rivals (assuming there is the domestic political will to sustain a long, expensive arms race). Likewise, sticking to modernize-in-place plans might provide sufficient deterrence (notwithstanding the risk that nuclear advantage could further embolden Russian or Chinese nuclear coercion or military adventurism). It is also possible that three-way parity is a viable middle option that splits the

difference.⁹⁷ The point is that Washington urgently needs to come to grips with whether a bigger nuclear arsenal is needed—and, if so, how much bigger.

In debating and deciding on a two-peer nuclear posture, it is incumbent on Washington to be honest with the American people that neither minimal nor maximal deterrence postures are conducive to achieving arms control.⁹⁸ A dual-track strategy in pursuit of arms control only makes sense if U.S. deterrence and arms control aims converge on the middle path of achieving a stable three-way nuclear balance. That is therefore the underlying premise of the following recommendations for gaining dual-track leverage.

Limited Strategic Expansion, Robust Hedging, and Drawing Red Lines

If the goal is reframed as measured strategic expansion—to prevent Russia from further growing its lead and making it more difficult for China to overtake and pass—then the Commission has offered many good ideas. Limited re-MIRVing could be especially useful for Washington to quickly and cheaply signal that it is pivoting to a dual-track stance. However, Washington should also consider closing technology gaps in new types of strategic delivery systems.

Re-MIRVing would initially be accomplished through uploading. This is the reverse of downloading, a process allowed in earlier arms control treaties to achieve numeric reductions in deployed strategic weapons by reducing MIRVs per missile rather than eliminating the missiles themselves. Washington has enough stored reserve warheads and enough excess delivery capacity on its ICBMs and SLBMs to quickly double the size of its deployed strategic arsenal.⁹⁹ Although not without significant costs, uploading is a form of recycling that is much less expensive than producing new warheads and delivery systems.

97 In this context, the terms *minimal* and *maximal deterrence* are used loosely to represent a spectrum of options. Minimal deterrence could encompass anything from unilaterally reducing to a few hundred nuclear weapons on the low side to modernizing in place as Russia and China pull ahead on the high side. Maximal deterrence could range from seeking a modest edge over both Russia and China individually on the low side to seeking a decisive advantage over their combined nuclear forces. The goal of achieving three-way parity would fall in the middle along this spectrum.

98 This assumes minimal or maximal deterrence are pursued as unilateral postures. Obviously, if three-way parity could be negotiated at very low levels, this might be characterized as a shared minimal deterrence posture that could be achieved through arms control. For a thoughtful discussion of this model in a tripolar context, see Stephen J. Cimbala and Lawrence J. Korb, “Can Minimal Deterrence Save Arms Control?” *Bulletin of the Atomic Scientists*, June 10, 2024, <https://thebulletin.org/2024/06/can-minimum-deterrence-save-nuclear-arms-control/>.

99 Trident D5 SLBMs are limited by New START to eight MIRVs but can carry 12, and Minuteman-III ICBMs have been completely de-MIRVed but can carry three MIRVs. See “Missile Threat: Minuteman III,” Center for Strategic and International Studies, April 23, 2024, <https://missilethreat.csis.org/missile/minuteman-iii/>; and “Missile Threat: Trident-D-5,” Center for Strategic and International Studies, April 23, 2024, <https://missilethreat.csis.org/missile/trident/>. Some open literature suggests Tridents may be deployed with an average of only four or five MIRVs. However, even assuming current Trident deployments at eight MIRVs, the U.S. should have total excess payload capacity to deploy 1,760 additional MIRVs.

Re-MIRVing fits the Goldilocks criteria of arms racing to catch up in the sense that Russia and China are already MIRVing their new generations of ICBMs.¹⁰⁰ There is, however, an acute action-reaction risk if the United States gets too far over its skis. Like Washington, Moscow has a large inventory of reserve and decommissioned warheads it could upload in response to American increases. Beyond near-term uploading, if Russia can sustain funding, it would be in a strong position to achieve a numerical advantage over the medium term. Unlike the United States, Moscow is already producing new nuclear weapons and ICBMs. Moreover, the MIRV payload potential of the new Satan-2 ultraheavy ICBM dwarfs all current and planned American strategic missiles. Thus, for Washington, uploading should only be used judiciously, to signal latent arms racing potential rather than to initiate an all-out MIRVing competition.

Recommendation. As part of a deliberate dual-track pivot, Washington should announce plans for a token uploading of existing Minuteman ICBMs when New START expires. This should entail a very small increase of 25–50 total additional warheads. This move should be explained as not the first salvo in a numerical strategic arms race but as a measured hedge to account for uncertainties about actual Russian and Chinese strategic deployments (due to the lack of arms control transparency) and as a modest offset to Russia’s overall nuclear edge due to its vast substrategic overmatch. The United States should announce it would consider further commensurate uploading of its ICBMs and SLBMs only if it believed Russia (or, in the future, China) was increasing strategic deployments beyond New START levels. This amounts to marrying a symbolic numerical increase in strategic weapons with the promise that the United States will not allow itself to fall too far behind.

Numbers are only part of the strategic nuclear balance. A technology race is also underway. Russia is rushing to develop and deploy an array of what it claims will be game-changing strategic delivery technologies, and China may now be in this hunt with FOBS. The United States does not need to match every exotic new system, but Washington ignores a potential revolution in strategic delivery systems at its peril. It will have no leverage to seek negotiated limits on classes of strategic systems it does not possess.

Recommendation. The United States should take immediate steps to prevent Russia (or China) from achieving a decisive qualitative advantage in strategic delivery systems. Specifically, the United States should explore the feasibility and cost effectiveness of two new programs that are not included in current U.S. modernization plans.

1. *Nuclear-capable MHVs.* The United States should develop nuclear variants for existing boost-glide and air-breathing MHV systems that are already in development as conventional systems. The purpose would be to provide the option to offset planned Russian nuclear MHV deployments and any potential Chinese deployments. These systems

¹⁰⁰ Russia claims this re-MIRVing is occurring within overall New START parameters, although this claim is no longer backed up through detailed data exchanges and on-site inspections.

should be deployable across the nuclear triad if MHV technology pans out. This program would be arms racing from behind because Russia is deploying nuclear MHVs. It should also be extremely cost effective because MHVs are already being developed for conventional missions.

2. *New heavy ICBM.* The United States should supplement the Sentinel program with a heavier ICBM. Sentinel is designed as a like-type replacement for the Minuteman III, which can carry three MIRVs. The new program should be a like-type replacement for the retired Peacekeeper heavy ICBM that could carry ten MIRVs and was deployable in existing silos. This would narrow the coming throw-weight gap with Russia as it deploys Satan-2 ultraheavy ICBMs and hedge against a further breakout if Moscow extends production and deployment. Perhaps more importantly, it would provide greater flexibility to deploy multiple nuclear-armed MHVs in addition to traditional MIRVs, again closing a looming gap (with the Satan-2 reportedly being able to deliver three MHVs). This program should not delay Sentinel but could replace later Sentinel deployments.¹⁰¹ This program would narrow an existing and growing gap, but it would be hugely expensive. This may be a necessary exception to the Goldilocks rule where penny wise really would be too pound foolish.

These new strategic delivery systems should move forward immediately. However, neither should occasion any numerical buildup in deployed strategic offensive weapons until and unless Russia undertakes further numerical expansion or China is close to overtaking U.S. strategic force levels. As discussed later in this chapter, these programs should be initiated in conjunction with arms control proposals for a ban or low limits on heavy ICBMs and on nuclear-armed or intercontinental-range MHVs.

Beyond this limited strategic expansion, Washington should heed the Commission's calls by initiating a robust strategic nuclear hedging posture to demonstrate it is ready to respond to a Russian strategic breakout or any apparent Chinese bid for nuclear superiority.

Recommendation. The United States should undertake wide-ranging contingency preparations for maximum uploading of reserve warheads on existing ICBMs and SLBMs, recommissioning warheads now awaiting destruction to return to the reserve stockpile, resuming production of new nuclear warheads, and resuming underground nuclear testing in response to Russian or Chinese testing. Washington should also negotiate contingency clauses to fully MIRV the new Sentinel ICBM and to buy larger numbers of B-21 bombers with ALCMs and *Columbia*-class SSBNs with SLBMs by extending production lines past current program completion dates. Finally, intelligence resources should be prioritized

¹⁰¹ In a world of perfect strategic logic, the United States would cancel the troubled Sentinel program to shift priority and resources to a new heavy ICBM. However, the delay involved would almost certainly require a costly life-extension program for Minuteman III. It would also reenergize the unhelpful domestic political debate about the need for land-based missiles versus cutting back from a nuclear triad to a dyad.

to track Russian and Chinese nuclear programs and deployments in the absence of arms control verification.

Taken together, these contingency-only steps would visibly prepare Washington to compete effectively in an arms race of Russian or Chinese choosing. Although the United States would express hope that it would never need to operationalize any of these hedging preparations, it is essential that it be seen as willing and able to do so. The hope is that this obvious preparedness would discourage further arms racing and incentivize Moscow and Beijing to negotiate a stable balance instead. As discussed later in this chapter, these hedging steps should be initiated in conjunction with U.S. arms control proposals for equal caps on the overall number of deployed or quickly deployable nuclear weapons.

These steps mirror the Commission's key recommendations for a major strategic buildup, other than developing a mobile variant of the Sentinel ICBM.¹⁰² The difference is that they would be strictly held in abeyance as contingencies to be triggered only in response to Russian or Chinese bids for advantage. These Russian or Chinese triggers should be spelled out clearly as declaratory red lines. Granted, this may be trickier than it sounds.

For Russia, this is straightforward: the United States would respond promptly and proportionally to any perceived strategic buildup beyond the current New START status quo. For China, the calculation is complicated by uncertainty about its intentions. If China is stalking superiority rather than parity, then staying ahead of it would seem prudent. But preempting Beijing could provoke Moscow if Moscow is showing restraint. Tricky, indeed.

If Putin behaves like Putin, things will remain straightforward. Sooner or later, and probably sooner, he will test American resolve. Washington would respond proportionately, with the collateral effect of making it that much harder for China to catch up. Washington would continue to propose arms control measures to set a stable and predictable trilateral balance.

The United States also needs to establish separate red lines for China in case Putin refrains from further strategic buildup while China keeps building. For example, pointing to uncertainties about China's capabilities and goals absent an arms control relationship, the United States could declare that it would begin proportional expansion of its strategic forces if and when it assesses that China has come within some number (say 500–700) of parity. In conjunction with this declaratory trigger, Washington could specify that it would only consider allowing China to reach numeric parity in the context of a verifiable trilateral arms control arrangement. Absent arms control, it would work to stay ahead along these lines.

¹⁰² Developing a road-mobile ICBM, as suggested by the Commission and others, makes strategic sense and fits the Goldilocks criterion of closing a significant existing capability gap with both Russia and China. However, the Cold War experience shows that deploying mobile ICBMs is likely to raise acute local and national domestic political opposition. This idea is therefore omitted from any initial hedging recommendation to avoid provoking an unnecessary public outcry.

If Russia has been restrained but China triggers an American buildup, tripolar action-reactions could get even more tricky because this would presumably trigger a Russian response. Russia could avoid making things worse by only matching U.S. increases aimed at China. A silver lining is that such a situation could help convince Moscow that trilateral arms control is beneficial as a way to avoid being dragged into an arms race with Washington that is being driven by China. The scenario of Russian restraint seems fantastical through today's geopolitical lens, but it should be considered as a potential future twist.

Washington might also consider establishing a separate red line by declaring that it would initiate a numeric strategic buildup if it assessed that China or Russia were developing and deploying FOBS as a strategic nuclear delivery system. As discussed later in this chapter, in conjunction with this declaratory warning Washington could propose negotiating a trilateral or multilateral ban on such systems.

Substrategic Expansion, Hedging, and Signaling

The United States lags China and especially Russia in deploying substrategic nuclear forces, especially at medium and intermediate ranges. These yawning gaps are numerical, qualitative, and geographic. The severity of these relative shortfalls risks undermining the credibility of U.S. extended deterrence to protect allies against aggression and therefore the confidence of those allies in American security assurances in general. Increasing the numbers and capabilities of U.S. substrategic systems and deploying them expeditiously to the European and Asian theaters is thus an urgent imperative to reinforce extended deterrence. It is also low-hanging fruit for gaining negotiating leverage by arms racing from far, far, far behind.

Supplementing nuclear gravity bombs with forward-deployed nuclear-armed IRBMs or GLCMs in Europe and introducing substrategic systems to Asia would narrow qualitative and quantitative imbalances. That said, allies' appetite for hosting an influx of American substrategic nuclear forces is limited. Poland has expressed interest in participating in NATO's existing nuclear sharing arrangements for gravity bombs to counter recent Russian nuclear deployments in Belarus, and this is certainly worth pursuing.¹⁰³ For now at least, there is no indication that America's European or Asian allies are ready to reprise the original dual-track faceoff by inviting Washington to deploy nuclear IRBMs or GLCMs on their territories. The best bet for now is therefore a combination of sea-based deployments, augmented by hedging and signaling the possibility of future land-based nuclear deployments.

Recommendation. The United States should press forward with development of the new SLCM-N. However, because this controversial program is still in development and could

103 "Poland's Leader Says His Country Is Ready to Host NATO Members' Nuclear Weapons to Counter Russia," *Associated Press*, April 22, 2024, <https://apnews.com/article/poland-nuclear-weapons-nato-russia-ukraine-d92c508d6ff53683a25f1bc62d256f86>.

experience further delays, it will not provide near-term deterrence relief or negotiating leverage. It is also risky to wait to patch the holes in America's extended deterrence credibility, considering brewing Russian and Chinese threats to U.S. allies and Taiwan.¹⁰⁴ As a stopgap, the Defense Department should therefore explore the feasibility (costs and timeline) of recertifying and resuming naval deployments of nuclear-armed Tomahawk land attack cruise missiles, as suggested several years ago by two former Obama administration senior defense officials.¹⁰⁵

Recommendation. The United States should press forward with hedging and signaling steps short of deploying nuclear-armed missiles on allied territory in Europe and Asia. These should include permanent conventional deployments of the U.S. Army's new Typhon mid-range capability (MRC) missile system and future short- to intermediate-range MHVs. This would reinvent a Defense Department initiative that was launched late in the first Trump administration.¹⁰⁶ The outgoing Biden administration has already taken major steps in this direction. MRC was temporarily deployed to the Philippines during a recent joint exercise.¹⁰⁷ This should be followed up with additional temporary deployments and urgent consultations with Asian allies about permanent deployments. In Europe, Germany has agreed to host episodic MRC deployments beginning in 2026 "as part of planning for enduring stationing of these capabilities in the future."¹⁰⁸ This permanent stationing should occur as soon as possible and include conventional MHV deployments as these systems become operational. Deployments should also expand to other NATO countries. As discussed later in this chapter, these deployments should be initiated in conjunction with arms control proposals to limit land-based nuclear-armed IRBMs and GLCMs.

These deployments will provide useful new conventional warfighting reach, and they also can and should be used to signal latent nuclear deployment capabilities. MRC is a launch system for ballistic and cruise missiles that would have been banned by the INF Treaty, including Tomahawk, which in the past was nuclear armed. Such deployments therefore tacitly signal the availability of INF options. This signal would be especially clear if the U.S. deployed nuclear Tomahawks at sea per the above recommendation. If further signaling is

104 Robert Soofer, "The U.S. Is Building a Nuclear Sea-Launched Cruise Missile: Congress Must Make Sure It's Built Right," Atlantic Council, April 3, 2024, <https://www.atlanticcouncil.org/blogs/new-atlanticist/the-us-is-building-a-nuclear-sea-launched-cruise-missile-congress-must-make-sure-its-built-right/>; and Anya L. Fink, "Nuclear-Armed Sea-Launched Cruise Missile (SLCM-N)," Congressional Research Service, May 31, 2024, <https://crsreports.congress.gov/product/pdf/IF/IF12084>.

105 Sandy Winnefeld and James N. Miller, "Bring Back the Nuclear Tomahawks," *Proceedings*, May 2017.

106 Thomas Gibbons-Neff, "Pentagon Chief in Favor of Deploying U.S. Missiles to Asia," *New York Times*, August 3, 2019, <https://www.nytimes.com/2019/08/03/world/asia/us-missiles-asia-esper.html>.

107 U.S. Army Pacific, "U.S. Army's Mid-Range Capability Makes Its First Deployment in the Philippines for Salaknib 24," April 15, 2024, <https://www.usarpac.army.mil/Our-Story/Our-News/Article-Display/Article/3740807/us-armys-mid-range-capability-makes-its-first-deployment-in-the-philippines-for/>.

108 The White House, "Joint Statement from United States and Germany on Long-Range Fires Deployment in Germany," July 10, 2024, <https://www.whitehouse.gov/briefing-room/statements-releases/2024/07/10/joint-statement-from-united-states-and-germany-on-long-range-fires-deployment-in-germany/>.

warranted short of actual nuclear deployments, Washington could explore allies' willingness to construct and certify nuclear weapons storage facilities on a contingency basis. This would send a clear signal that Washington and its allies were tiptoeing to the threshold of regional nuclear deployments.

The Unspoken 800-Pound Gorilla of Leverage

During the 2016 presidential election campaign, candidate Trump said the quiet part out loud: It might be a good idea for Japan and South Korea to have their own nuclear weapons.¹⁰⁹ This caused great consternation at the time, but it points to a potent source of leverage that could persuade China and Russia that arms control is a better bet than arms racing.

A bedrock of U.S. nuclear policy for many decades has been to persuade allies that the American nuclear umbrella provides them with a deterrent sufficient to obviate the need for their own nuclear weapons. This is why U.S. extended deterrence has sometimes been called the secret sauce of nuclear nonproliferation. If China and Russia seem to be gaining ground in an uncontrolled nuclear arms race with the United States—particularly if growing substrategic imbalances raise doubts about the credibility of America's extended-deterrence guarantees—then it is conceivable that some skittish U.S. allies could decide they need to go nuclear. This scenario is not as far-fetched as it might have been only a few years ago. Recently, there have been open debates about whether to go nuclear within the strategic and political circles of key U.S. allies, including Australia, Germany, Japan, and South Korea.¹¹⁰ These countries all have the economic wherewithal and technical prowess to become major nuclear powers should they choose. Japan, which has advanced missile capabilities and enough stockpiled fissile material to produce several thousand nuclear weapons, could quickly become a fourth nuclear superpower if it wanted to.

If these American allies decided to join the great power nuclear fray in their own right, that would upend any prospects that Russia or China could achieve commanding strategic or regional nuclear dominance. Japan alone could tilt the balance dramatically, and it would do so against both China and Russia (having territorial disputes with each). Moreover, for

109 Stephanie Condon, "Donald Trump: Japan, South Korea Might Need Nuclear Weapons," *CBS News*, March 29, 2016, <https://www.cbsnews.com/news/donald-trump-japan-south-korea-might-need-nuclear-weapons/>.

110 See, for example, Sayuri Romei, "Watching Ukraine, South Korea and Japan Eye Nuclear Weapons," *Bulletin of the Atomic Scientists*, July 20, 2023, <https://thebulletin.org/2023/07/watching-ukraine-south-korea-and-japan-eye-nuclear-weapons-heres-what-the-us-should-do/>; Bertrand Benoit and Bojan Pancevski, "Germans Debate the Once-Unthinkable: Do We Need Nuclear Weapons?" *Wall Street Journal*, February 27, 2024, <https://www.wsj.com/world/europe/germans-debatethe-once-unthinkable-do-we-need-nuclear-weapons-13fa7e68>; Mitch Shin, "The Great Debate Over South Korea Developing Nuclear Weapons Is Back," *The Diplomat*, May 16, 2024, <https://thediplomat.com/2024/05/the-great-debate-over-south-korea-developing-nuclear-weapons-is-back/>; and Daniel Flitton, "Nuclear Subs, Nuclear Power...Could Nuclear Weapons Be Next?," *The Interpreter*, June 19, 2024, <https://www.lowyinstitute.org/the-interpreter/nuclear-subs-nuclear-power-could-nuclear-weapons-be-next>.

lingering historic reasons, Germany for Russia, and Japan for China, would be especially unwelcome as powerful nuclear rivals.

Although this scenario remains improbable, growing doubts about the reliability of U.S. nuclear guarantees could make it less so. For example, most South Koreans already doubt the reliability of U.S. nuclear guarantees and overwhelmingly support their country going nuclear.¹¹¹ Alarming American allies by aggressively arms racing against it could therefore backfire spectacularly for China and Russia, especially if it looked like they were winning. This presents Moscow and Beijing with a potential catch-22 dilemma that may make a nuclear arms race unwinnable for them. In contrast, negotiating arms control arrangements to manage tripolar nuclear competition would almost certainly head off any chance that a U.S. ally would decide to go nuclear. This could be a stealth factor that affords Washington more arms control leverage than it realizes.

Recommendation. Washington should not alter its longstanding commitment to nuclear nonproliferation unless it has its back against the wall or its allies take the issue out of its hands. However, the time may have arrived for private signaling that this commitment is not immutable. In bilateral talks with China and Russia, the United States could fret that an uncontrolled arms race might push some of its anxious allies to learn to love the bomb. Even if just one ally broke ranks, say South Korea, then others could quickly follow in a domino effect. Beijing and Moscow could be allowed to cogitate for themselves how resolutely Washington would discourage this if it comes to feel outgunned in a two-peer arms race—or whether an American president might someday even offer assistance, as the United States has done with Britain and France. That version of an expanded nuclear arms race is a nightmare for Russia and China that they would have the strongest imaginable incentives to avoid.

Coinciding Arms Control Proposals

A fully-fledged arms control element must complement the bargaining levers. The arms control piece of the dual-track equation should be developed beforehand, or at least in tandem, and not as an afterthought to the leverage steps. Arms control proposals should also be seen as potent leverage in their own right, as tools of competitive diplomacy to bring mounting international pressure on China and Russia to engage constructively. Finally, earnestly pursuing credible arms control initiatives should be understood as helping sustain domestic political support for enduring the costs of nuclear competition.

From the U.S. standpoint, any future arms control must be trilateral. Even if Russia were amenable to another round of bilateral negotiations (which it is not), going along would merely let China off the hook (again) for not participating. Negotiating new bilateral limits with Russia would amount to strategic malpractice given that China is America's main

111 Kyu-Jin Shin, "72.8% of Koreans Support S. Korea's Nuclear Weapon," *Dong-a Ilbo*, February 26, 2024, <https://www.donga.com/en/article/all/20240206/4731163/1>.

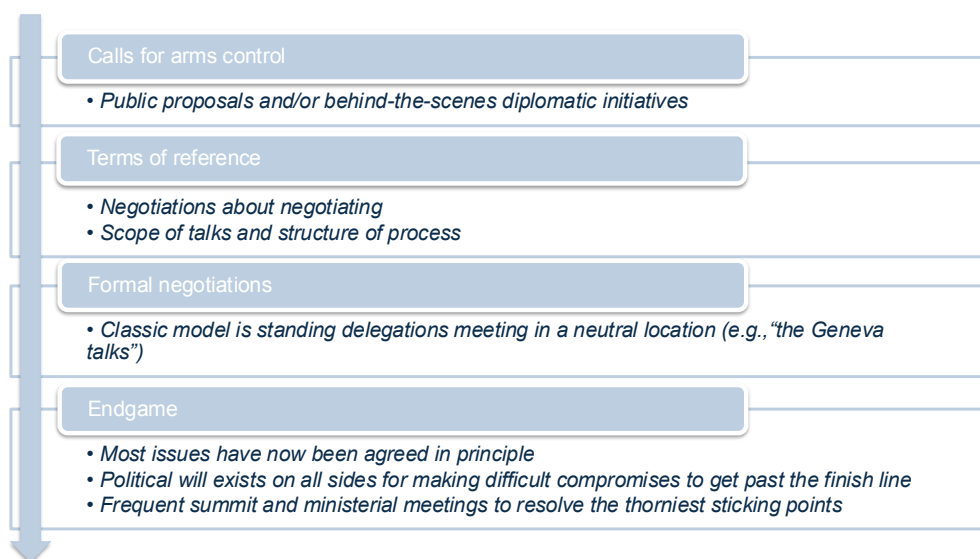
global rival and is plunging headlong toward unknown nuclear goals. It makes no sense for Washington to negotiate new nuclear constraints only with the junior partner of the anti-American entente.

In theory, it might be possible to pursue two parallel bilateral negotiations rather than a formal trilateral process. However, this would hopelessly complicate the fundamental quest to shape a stable three-way nuclear balance. Imagine how unworkable it would be to implement parallel treaties with divergent limits, definitions, counting rules, verification schemes, consultative processes, and so forth. Despite the manifest complications trilateral negotiations would entail, this is the only workable option for the United States.

The first phase of any arms control process (see Figure 1) is to persuade would-be adversaries to participate. Getting over this initial hump will be a daunting challenge, regardless of how deftly a dual-track strategy is prosecuted. Beijing and Moscow may be persuaded to come to the nuclear bargaining table in a serious way, but only if they see Washington is serious about the arms racing. Even then, they will need to be convinced this is a durable bipartisan stance that cannot be waited out or undermined. In the most optimistic scenario, this will take at least a few years to sink in and will doubtless involve some provocative testing of American mettle along the way.

However, everything needs to start with a big, bold, and somewhat detailed U.S. arms control initiative that lays out a clear, workable vision for cooperation among prospective adversaries. Such an initiative would be directed at China and Russia in the first instance, but its wider secondary audiences would include the American people, key allies and their publics, and the broader international community.

FIGURE 1: TYPICAL PHASES OF AN ARMS CONTROL PROCESS



China and Russia are sure to rebuff any arms control framework the United States proposes. This should be expected and not perceived as a failure. To the contrary, adamant rejection is a feature and not a bug of the initial phases of a competitive arms control process. Most successful arms control treaties have started life as a U.S. proposal that was initially rejected out of hand. The goal of launching an arms control initiative is to frame the agenda and to pressure China and Russia to explain why they are rejecting it and offer constructive alternatives. The more reasonable, workable, and beneficial the initial U.S. proposal, the more it will make them squirm. This is using arms control as a hardnosed tool of competitive diplomacy.

Many U.S. leaders have launched a long-shot major arms control initiative to ultimate good effect. One that stands out is Reagan, who used a 1982 commencement speech at his alma mater to succinctly propose, justify, explain, propound, and frame the parameters for what would become the START negotiations. It is worth quoting at length as an exemplar of the form. After acknowledging what he called the “nightmarish” danger of nuclear weapons, he went on to expound:

I wish more than anything there were a simple policy that would eliminate that nuclear danger. But there are only difficult policy choices through which we can achieve a stable nuclear balance at the lowest possible level.... We must seek agreements which are verifiable, equitable, and militarily significant.... We're consulting with congressional leaders and with our allies, and we are now ready to proceed.

The main threat to peace posed by nuclear weapons today is the growing instability of the nuclear balance. This is due to the increasingly destructive potential of the massive Soviet buildup in its ballistic missile force.

Therefore, our goal is to enhance deterrence and achieve stability through significant reductions in the most destabilizing nuclear systems, ballistic missiles, and especially the giant intercontinental ballistic missiles, while maintaining a nuclear capability sufficient to deter conflict, to underwrite our national security, and to meet our commitment to allies and friends.... The focus of our efforts will be to reduce significantly the most destabilizing systems, the ballistic missiles, the number of warheads they carry, and their overall destructive potential.

At...the end of the first phase of START, I expect ballistic missile warheads, the most serious threat we face, to be reduced to equal levels, equal ceilings, at least a third below the current levels. To enhance stability, I would ask that no more than half of those warheads be land-based. I hope that these warhead reductions, as well as significant reductions in missiles themselves, could be achieved as rapidly as possible.

In a second phase, we'll seek to achieve an equal ceiling on other elements of our strategic nuclear forces, including limits on the ballistic missile throw-weight at less than current American levels. In both phases, we shall insist on verification procedures to ensure compliance with the agreement.

This, I might say, will be the 20th time that we have sought such negotiations with the Soviet Union since World War II. The monumental task of reducing and reshaping our strategic forces to enhance stability will take many years of concentrated effort. But I believe that it will be possible to reduce the risks of war by removing the instabilities that now exist and by dismantling the nuclear menace.... We will negotiate seriously, in good faith, and carefully consider all proposals made by the Soviet Union. If they approach these negotiations in the same spirit, I'm confident that together we can achieve an agreement of enduring value that reduces the number of nuclear weapons, halts the growth in strategic forces, and opens the way to even more far-reaching steps in the future.¹¹²

The START negotiations lasted almost a decade and went through many permutations, including a total collapse after the Soviet walkout in 1983. The treaty that ultimately emerged was, however, remarkably similar to the broad parameters Reagan had framed at the outset. Consultations with Congress and allies beforehand and at each step along the way helped ensure domestic and international support throughout the lengthy negotiations and for the resulting treaty. This is how a serious arms control initiative is done.

Reagan addressed himself as much to the domestic and wider international audience as to Moscow. In doing so, he was not shy about calling out the Soviets for forcing the United States to arms race to catch up, about demanding cuts in systems where Moscow enjoyed a clear advantage, or about stressing the need for verification at a time when the Soviets adamantly rejected intrusive on-site inspections. Reagan's START initiative was straightforward, understandable, and broadly appealing: the two superpower rivals should accept a stable, equitable, and verifiable mutual balance at the lowest possible levels rather than continuing an endless, expensive, and dangerous arms race.

Recommendation. The United States should propose a trilateral nuclear arms control treaty to shape a stable, predictable, and verifiable three-way nuclear balance. This treaty should set equal numeric limits on the total number of deployed or quickly deployable nuclear weapons for all types of nuclear forces, including strategic and substrategic systems. These overall numeric nuclear weapons limits should be set at or below current U.S. levels. These overall nuclear weapons limits should be supplemented by total bans or low sublimits on the following types of delivery systems: Intercontinental-range and nuclear-armed MHVs; FOBS, whether nuclear or conventional; long-range autonomous nuclear-armed or -powered torpedoes; nuclear -powered cruise missiles; heavy ICBMs, including the number of missiles and the MIRVs per missile; mobile ICBMs; and land-based nuclear-armed intermediate-range missiles.

Recommendation. The United States should also propose the immediate negotiation of stand-alone interim agreements to freeze further development, testing, or deployment of the most potentially destabilizing emerging nuclear delivery technologies: FOBS and

112 Reagan, "Address at Commencement Exercises at Eureka College, Eureka, Illinois, May 9, 1982," Reagan Foundation, <https://www.reaganfoundation.org/media/128700/eureka.pdf>.

intercontinental-range or nuclear-armed MHVs. These interim freezes should remain in place until permanent bans or limits can be negotiated.

There are advantages to seeking numeric limits on overall nuclear weapons rather than trying to replicate the Cold War formula of negotiating separate treaties for strategic, intermediate, and short-range nuclear forces. This approach smooths out trilateral complexities and numeric and qualitative asymmetries by allowing each party to determine its own force structure, including its own mix of strategic and sub-strategic forces. This would sidestep Russia's longstanding refusal to negotiate limits on tactical nuclear weapons per se. Finally, this formula provides a topline outcome that offers a simple, straightforward, and comprehensive three-way nuclear balance. Subbans or limits on delivery systems would then help control the most destabilizing first-strike counterforce systems.

Setting equal nuclear weapons limits at current U.S. levels has the advantage of being difficult for Beijing to reject because it would let China grow to parity while the United States made that easier by staying in place. This effectively robs Beijing of its primary excuse for spurning arms control talks. All Beijing needs to do is relent on its refusal to countenance intrusive verification. In contrast, Russia would find this formula galling, because it alone would need to make reductions. Washington could redress this by suggesting lower ceilings that would require it also to make cuts—in effect meeting China somewhere in the middle on its way up—but of course that would mean still deeper Russian cuts. In the end, any equitable three-way balance will require Russia to cut more because it has more. That is precisely why Washington needs to convince Russia that retaining its nuclear edge is not in the cards either way. Whether limits are proposed at or below current U.S. levels, the United States would continue to pursue a nuclear buildup, as outlined here, over the course of presumably lengthy negotiations. Therefore, Washington ultimately would also have to make reductions. China alone could keep growing to uncontested parity, which seems like a tempting deal for Beijing.

However, China would rage over verification. Unlike Russia, it has no experience with negotiated intrusions on its sovereignty, and nuclear opacity is deeply ingrained in Chinese strategic culture. Russia is also unlikely to be receptive. It gives every indication that it is happy to be free of decades of irksome data exchanges, on-site inspections, and compliance commissions. Because of this resistance, U.S. insistence on intrusive verification is likely to be one of the most difficult aspects of any trilateral nuclear negotiations, just as it was with the Soviets during the Cold War. Moreover, a treaty limiting all nuclear weapons would require far broader intrusiveness than previous bilateral treaties, so this proposal would kick Chinese and Russian verification hesitancy into overdrive.

None of that matters, though, because insistence on effective verification must be as non-negotiable for the United States now as it was in the past. It is all the more vital because an equal three-way balance would tilt in favor of the Chinese-Russian strategic axis—as the Commission correctly observed—leaving scant margin for error or doubt about Chinese or Russian breakout or cheating. There are many tradeoffs and concessions the United States

would need to consider during formal negotiations and especially in an endgame phase (see Figure 1), but Washington needs to make it clear from the outset that compromising on verification will never be among them.

These recommended proposals feature aspects that are conspicuously lopsided in U.S. favor, such as bans or caps on types of delivery systems that Russia or China have or are developing but the United States does not have and is not developing. Including these in a going-in proposal is of course another type of bargaining chip. But it is also true that things like nuclear MHVs, FOBS, and ultraheavy ICBMs are genuinely destabilizing and require sublimits if there is to be any hope for stable three-way mutual deterrence. It is likewise true that Washington would be putting itself at an inherent disadvantage by acceding to an equal three-way balance with two nuclear peers that are arrayed together against it. If it is going to accept this inherent handicap, then it is reasonable for Washington to insist on certain sublimits to preclude further tipping the counterforce scales.

The recommendation to go big and bold on arms control for dual-track purposes does not preclude trying to pluck some low-hanging fruit to draw China and Russia into a dialogue, prime the pump by demonstrating initial progress, and even enhance strategic stability at the margins. Examples might be to trilateralize the U.S.-Russia Nuclear Risk Reduction Centers (successors to the original hot line arrangement) or negotiate trilateral confidence-building measures such as providing prenotification of military exercises involving nuclear forces. If Beijing and Moscow agree, that is at least modest progress. On the other hand, if they refuse to consider such anodyne proposals, this would help paint them as intransigent. Even if this could be a win-win tactic, milquetoast measures like these will not change any fundamentals of tripolar nuclear competition, and they should not be oversold as doing so.

All of this is calibrated as the opening move in a presumably long, difficult, and unpredictable arms control process as simplified in Figure 1. The dual-track focus of an initial proposal is therefore squarely on the first phase of compelling Beijing and Moscow to the negotiating table. Only if this works and things then proceed to serious negotiations will the three nuclear rivals need to work through the nitty-gritty details of producing a workable treaty. Difficult concessions would need to be weighed by all sides, including the United States. For example, Washington would need to decide whether it is willing to countenance inevitable Russian and Chinese demands to negotiate limits on missile defenses as part of nuclear controls. Such tradeoffs would raise all manner of complex interlinkages if talks progress toward the endgame. For example, it is all but inconceivable that the United States would concede to new missile defense limits unless China and Russia were willing to ban or severely curtail MHVs, FOBS, and ultraheavy ICBMs—and the list goes on.

Negotiating a trilateral nuclear treaty would entail wicked difficulties, even if all three parties genuinely wished for a positive outcome. For better or worse, though, these are not worries for the present moment. China and Russia do not genuinely wish for a positive arms control outcome. Russia openly prizes the coercive potency of its nuclear edge, and China's

stance suggests it wants to erase its temporary disadvantage by achieving parity or more. Neither shows the least sincere interest in negotiating with the United States.

This report has made the case that a deftly crafted and executed dual-track arms control strategy is the best chance to improve today's dim prospects for trilateral superpower nuclear arms control by changing the cost-benefit calculations in Beijing and Moscow. This approach worked during the Cold War, though past performance is no guarantee of future success. It is all but certain, however, that if Washington does not gain leverage, if it continues doing the same thing and hoping for a different result, then it is unlikely to see Russia and China at the nuclear bargaining table anytime soon.

CHAPTER 5

Conclusion

The United States needs greater strategic clarity as a nation and with its allies about the role arms control can play to manage runaway nuclear competition against an entente of two revanchist nuclear peers. Part of this clarity involves acknowledging that the Cold War concept of a nuclear balance—which only recently seemed hopelessly outmoded—has returned to the forefront of great power rivalry and that this balance is tilting in favor of the Chinese–Russian axis. Wishful thinking about arms control is clouding difficult but necessary strategic choices about this piece of the geopolitical puzzle.

Pretending that the existential danger of nuclear war can be easily solved by waving the magic wand of arms control is fantasy. Arms control will not be easy, and just wanting it will not make it happen. That is where difficult strategic choices come in.

Minimal deterrence proponents may be correct that an unfavorable nuclear balance is less risky than an arms race to rebalance it. Although Russia's recent penchant for nuclear coercion and the lessons China may be learning from it seem to belie sanguine views about relative nuclear weakness, minimal deterrence advocates should make their best case. As they do so, however, they should not pretend any deleterious effects that may flow from an unfavorable nuclear balance are likely to be ameliorated down the road by arms control. To choose minimal deterrence is to forgo the leverage that is a prerequisite to achieving meaningful arms control breakthroughs. Asserting otherwise is naïve or dishonest. Relative weakness may be tough for nuclear doves to sell, but sugarcoating the risks of minimal deterrence with unrealistic hopes for arms control is a disservice to honest debate.

On the other hand, maximal deterrence proponents may be correct that a three-way nuclear balance would provide insufficient deterrence against two autocratic strategic rivals that are actively teaming up to dislodge the United States from its position of global and regional preeminence, including by fracturing its network of alliances. The often-unvoiced issue here is that achieving robust deterrence against both rivals taken together requires attaining oversized superiority over each of them individually. Hawks may question the most

alarmist warnings of proponents of action-reaction arms racing theory, but it beggars belief that Beijing and Moscow would graciously accede to what each would see as a U.S. bid for outright nuclear dominance. If it does come down to a tit-for-tat, two-against-one arms race, the United States may be hard pressed to come out on top. Hawks may choose not to call it arms racing, but by any name this is a formula for intense and indefinite nuclear competition. This too may be tough to sell domestically, given the costs and risks of a simultaneous arms race against two nuclear superpowers with no end in sight. To be fair, nuclear hawks are less apt in making their case to hype the idea that arms control is coming to the rescue. Still, they should be more forthright that seeking a nuclear edge over Russia and China, even in the name of parity with them both, all but rules out the possibility for arms control.

Finally, it may be that the core argument of this report is correct, and that the best answer is to seek to enhance stable mutual deterrence by negotiating a verifiable three-way nuclear balance. This is not likely to work unless the United States gains more negotiating leverage. Doing this will not guarantee success, but not doing it pretty much guarantees failure. Arms control is possible, but having a decent shot at it probably requires Washington to pursue a deft and deliberate dual-track strategy. Arms racing toward arms control would also be tough to sell domestically. That said, as a middle way, it may come to be seen as the least worst of unpalatable alternatives.

The critical role of relative leverage in competitive arms control negotiations has long been understood by many theorists and practitioners. This was once taken as a given of mainstream thinking about arms control, but the more than three-decade pause in superpower nuclear rivalry has dropped this understanding into a memory hole. There are dim recollections that the United States once faced a nuclear arms race and that arms control somehow helped manage the situation. However, after three quiescent decades, many Americans seem to have forgotten that competitive arms control is a hardnosed business and that success does not come by happenstance.

The choices for the United States are finite: accept minimal deterrence, pursue maximal deterrence, or seek to preserve a balance and in the process to gain sufficient leverage to negotiate a workable three-way stalemate. These may not be particularly appealing choices, but the time for avoiding them is long past.

LIST OF ACRONYMS

ABM	Anti-ballistic missile
ACDA	Arms Control and Disarmament Agency
ALCM	Air-launched cruise missile
ALBM	Air-launched ballistic missile
ASAT	Anti-satellite weapon
DIA	U.S. Defense Intelligence Agency
FAS	Federation of American Scientists
FOBS	Fractional orbital bombardment system
GDP	Gross domestic product
ICBM	Intercontinental ballistic missile
INF	Intermediate-range nuclear forces
IRBM	Intermediate-range ballistic missile
MAD	Mutual assured destruction
MHV	Maneuverable hypersonic vehicle
MIRV	Multiple independently targetable reentry vehicle
MRC	Mid-range capacity
NATO	North Atlantic Treaty Association
NSC	National Security Council
SALT	Strategic Arms Limitation Talks
SDI	Strategic Defense Initiative
SLBM	Submarine-launched ballistic missile
SLCM	Sea-launched cruise missile
SLCM-N	Sea-launched cruise missile-nuclear
SORT	Strategic Offensive Reductions Treaty
SSBN	Ballistic missile submarine
START	Strategic Arms Reduction Treaty
TLAM-N	Tomahawk Land Attack Missile-Nuclear



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