U.S.-Russian Nuclear Cooperation: Insights from History

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Abstract: With arms control in crisis and strategic stability in jeopardy, it is worth remembering the remarkable success of nuclear cooperation between the United States and Russia in the late Cold War and post-Cold War periods, often referred to as the 'Golden Age of Arms Control'. In an effort to understand the current deterioration in U.S.-Russian arms control, this article presents a history of bilateral cooperation since the 1980s from both the American and Russian perspectives. We describe its past successes and investigate the current impasse using historical analysis and a collection of interviews with former diplomats, negotiation participants, and academics. From this analysis, we offer recommendations on best practices to reinvigorate arms control talks based on the historical lessons of success.

I. Introduction

Even during the darkest days of the Cold War, the United States and Russia confronted the danger of nuclear weapons and worked together to prevent a global catastrophe. When tensions were at their highest, arms control created fertile ground for their bilateral cooperation. The groundbreaking treaties of the era created transparency, verification mechanisms, and a vital backbone of strategic stability, with each country recognizing the value of constraint on one another's nuclear posture. The treaties, in turn, advanced nuclear security in the post-Cold War period, opening the door for a two-decade-long collaboration between American and Russian leaders and scientists who worked to avert the nuclear dangers arising from the Soviet Union's breakup.

However, collaboration on nuclear security has stalled in the twenty-first century as a result of renewed hostilities, diminishing political will, and evolving strategic priorities. With the clock ticking on the New Strategic Arms Reduction Treaty (New START), the last major treaty between the U.S. and Russia, and the Anti-Ballistic Missile Treaty (ABM Treaty) and Intermediate-Range Nuclear Forces Treaty (INF Treaty) in demise, the international community could witness the wholescale collapse of the U.S.-Russian strategic stability framework. In fact, tough rhetoric and major modernization programs might even signal the onset of a new arms race.

II. Research Direction

This paper seeks to redirect attention to the United States and Russia's historical cooperation on nuclear security and stability to see what insights the past offers. The deterioration of arms control initiatives is puzzling given their relative success in creating transparency, verification mechanisms, and strategic stability. Why did the U.S. and Russia abandon mechanisms that promote stability and security, and what were the tipping points for removal from arms control treaties? We answer this question by first examining significant episodes in the history of nuclear cooperation since the 1980s, with special attention given to how the strategic environment has changed and evolved. Then, we investigate the recent decline in arms control to understand why the United States and Russia abandoned mechanisms that promote strategic stability. We offer recommendations in our final section for renewed dialogue and cooperation in the nuclear sphere, drawing on lessons from the past to illuminate present policy challenges and potentials.

III. Breakthroughs in Past Nuclear Cooperation

Perestroika: Personalizing Arms Control

The rise of the reform-minded leader Mikhail Gorbachev created a fundamental shift in Soviet foreign policy towards the United States, with a monumental impact on nuclear cooperation. Alexander Saveliev of the Institute of World Economy and International Relations of the Russian Academy of Sciences said in an interview with the authors that, "there have been better times in relations between the United States and the Soviet Union or Russia. In my opinion, the Gorbachev and Reagan period was the best." Among other revolutionary breakthroughs, "New Political Thinking", the name Gorbachev gave to his new foreign policy approach, led to unprecedented cooperation on nuclear security. In January 1986, shortly after his first meeting with President Ronald Reagan at the Geneva Summit, Gorbachev made public his proposal for the U.S. and Soviet Union to eliminate their entire nuclear arsenals by the year 2000. For the first time, a Soviet leader had proposed to destroy the most important element of the Soviet defense system. The Chernobyl catastrophe a few months later had a huge impact on Gorbachev's personal perception of nuclear threats, according to his memoirs and advisors, Anatoly Chernyaev and Georgy Shakhnazarov.2

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¹ Alexander Saveliev, Head of the Strategic Studies Department, Center for International Security, Institute of World Economy and International Relations (IMEMO), participant in Soviet-American START-1 negotiations (Defense and Space Talks) representing the Academy of Sciences as an Adviser to the Soviet Delegation. IMEMO of the Russian Academy of Sciences. Interview with the authors. November 2019, Moscow.

² Anatoly S. Chernyaev. *My six years with Gorbachev*. Trans. and ed. Robert D. English and Elizabeth Tucker. University Park, PA: Pennsylvania State University Press, 2000.

In this atmosphere of fear and dread about the risks of nuclear power, Gorbachev and Reagan held a famous meeting in Reykjavik, Iceland, where they discussed the status of ballistic missiles and strategic arms in general. At the time, the meeting was considered by many, especially media commentators, as a failure. Reagan was vehemently criticized for his unwillingness to compromise on the Strategic Defense Initiative and rejecting Gorbachev's proposals to make unprecedented cutbacks in nuclear weapons. However, looking at this meeting in retrospect, it seems to have been a watershed moment in personal relations between the two leaders. Speaking face-to-face, frankly, and on neutral ground helped to personalize the arms control issue for those involved and develop interpersonal relationships.

The trust that Reykjavik built resulted in what many former diplomats and negotiation participants describe as the "Golden Age of Arms Control." Alexander Nikitin of the Moscow State Institute of International Relations said in an interview with the authors that the desire for nuclear cooperation and trust affected both Reagan and Gorbachev. According to Nikitin, "in terms of what made them think about the terrible consequences of a potential nuclear war, both Reagan and Gorbachev spoke in a manner that was extremely consequential." Even if Gorbachev and Reagan failed to agree on eliminating all nuclear arms in Reykjavik, the sides made important progress towards the START I and INF treaties. More concretely, this cooperation paved the way for the signing of the INF treaty in December 1987, a major milestone when the superpowers agreed for the first time to significantly reduce their nuclear arsenals, eliminate an entire category of nuclear weapons, and permit extensive on-site inspections for verification. The new trust between the United States and Russia also created a community of arms control experts, who were not only outstanding professionals, but also were capable of defusing tensions, developing control procedures, and resolving potential issues that arose during implementation.

End of the Cold War: A Sense of Urgency

The winding down of the Cold War saw rapid progress on disarmament efforts by the United States and Russia. Politicians and scientists alike recognized that the collapse of the Soviet Union put in jeopardy thousands of nuclear weapons and enough nuclear material for terrorists to make tens of thousands more. This danger prompted an unprecedented two-decade-long collaboration between the countries to strengthen Russian nuclear safety and security, reduce proliferation risks, and advance nuclear science. Siegfried Hecker, former director of Los Alamos National Laboratory and a central participant in these events, tells the dramatic story of how American and Russian nuclear scientists threw themselves into the job of preventing catastrophe, with lab-to-lab efforts that improved

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³ Alexander Nikitin, Professor of the Political Science department of the Moscow State Institute of International Relations (MGIMO), professor of the RF Academy of Military Sciences. Previously, research officer of the Institute for the U.S. and Canadian Studies of RAS, a member of the USSR mission to the UN. Moscow State Institute of International Relations. Interview with authors of this paper. November 2019, Moscow.

security and accountability for nuclear weapons, strengthened the technical foundations for stockpile stewardship, and built trust between the countries.4

The fast-changing political environment made it clear to the political leaders that the biggest threat posed by nuclear weapons was not their possible use in a war in western Europe, but the chance that they could end up in unsafe hands. In September 1991, President George H.W. Bush announced sweeping unilateral reductions to the U.S. nuclear arsenal under the Presidential Nuclear Initiatives (PNIs). His bold pledges to end foreign deployments of entire categories of tactical nuclear weapons inspired Gorbachev to respond with reciprocal Soviet measures. In January 1992, Bush and Gorbachev's successor, President Boris Yeltsin, conducted a second round of PNIs. Together, these presidential commitments eliminated far more nuclear weapons than did any arms control treaty. For that reason, Amy F. Woolf, a Congressional Research Service nuclear expert, joins Nikitin and others in defining the final years of the Cold War as the "Golden Age of Arms Control." She notes that leaders in Moscow and Washington had the political will to cooperate and capitalize on this historic moment. During an interview with the authors, Woolf said that, "The political environment for U.S.-Soviet / U.S.-Russian cooperation was changing so rapidly that policymakers were able to use arms control to contain, control, and eliminate large numbers of weapons. It was the political change of that era that gave rise to the ability to do arms control with some aggressiveness."5

Bush and Gorbachev launched a reverse arms race when they signed the Strategic Arms Reduction Treaty (START I) in July. It was a tremendous achievement resulting, during its final implementation in 2001, in the removal of about eighty percent of all strategic nuclear weapons then in existence. Furthermore, the Cooperative Threat Reduction program, introduced with the passage of the Soviet Threat Reduction Act in November 1991, provided financial and technical assistance to states of the former Soviet Union, including Belarus and Kazakhstan, to secure and dismantle the nuclear arsenals they had inherited. It is a testament to the program's success that these states subsequently joined the Nuclear Non-Proliferation Treaty as non-nuclear weapons states. The early 1990s witnessed intimate nuclear collaboration that would have previously seemed impossible. Developing lessons and themes from the Reagan era, it showed that the personal relationships between leaders and scientists were crucial to overcoming mutual distrust and addressing the serious risks of nuclear instability and nuclear terrorism. There was respect in both countries for the process of arms control as a mechanism to manage the bilateral relationship.

⁴ Siegfried S. Hecker, ed. *Doomed to Cooperate: How American and Russian Scientists Joined Forces to Avert Some of the Greatest Post-Cold War Nuclear Dangers*. Los Alamos, NM: Bathtub Row Press, 2016. 5Amy F. Woolf. Specialist in Nuclear Weapons in the Foreign Affairs, Defense, and Trade Division of the Congressional Research Service at the Library of Congress. Interview with the authors of the paper, December 2020, Stanford, United States.

IV. The Current Crisis in Arms Control

However, Russia and the United States have not moved in the general direction of nuclear restraint. In fact, political momentum for arms control has slowed upon entering the twenty-first century and recently has come to a standstill. There have not been bilateral strategic stability talks between the U.S. and Russia in over two years. The INF Treaty is all but nullified and New START's fate remains uncertain after February 2021, with no sign of new initiatives from either side. Despite achieving significant milestones in the post-Cold War era, a series of disputes have aggravated the atmosphere of mistrust and mutual hostility between the U.S. and Russia and subsequently halted progress on arms control. The following section will present explanations for the current crisis in U.S.-Russian arms control, describing the problems facing the U.S. and Russia and their respective positions.

Hesitation in Washington and declining relations

A decline in support for arms control in Washington has dimmed prospects for saving the existing arms control structure. The return of Putin to the Kremlin as president in 2012, the annexation of Ukrainian territories in 2014, disagreements over Syria, and Russian interference in the 2016 election hardened attitudes in the United States towards Russia and all but destroyed prospects for "resetting" relations. Moreover, conservative skepticism towards arms control has resurfaced in the Trump administration with the rise of critics, such as former National Security advisor John Bolton and the new special representative for arms control Marshall Billingslea, and helps to explain the opposition to a New START extension. This resistance to arms control has been an ongoing concern since the 1970s, when the Committee on Present Danger, an American foreign policy interest group, fought against mutual cooperation of reduction in nuclear weapons.8 They argued that America should not offer concessions, but simply outspend the Russians, a recipe for the arms race.

This conservative criticism returned in the Bush administration and contributed to Washington's decision to withdraw from the ABM Treaty in 2002. (Russia subsequently responded by withdrawing from START II). The Bush administration wanted to build expansive missile defenses without arms-control-imposed constraints to gain an advantage over the Russians and (more pressingly) to deter rogue states in their axis of evil.9 They argued that the limits on U.S. forces undermined American flexibility in developing an ideal force structure and prevented them from building up their forces to achieve a measure

⁶ Steven Pifer, "With US-Russian arms control treaties on shaky ground, the future is worrying." Washington, D.C: Brookings Institute, April 29, 2019. https://www.brookings.edu/blog/order-from-chaos/2019/04/25/nuclear-security-arms-control-and-the-us-russia-relationship/

⁷ Pavel Podvig, "Russia's current nuclear modernization and arms control." *Journal for Peace and Nuclear Disarmament* 1, no. 2 (2018): 256-267.

⁸ Jerry Sanders. *Peddlers of crisis: the Committee on the Present Danger and the politics of containment.* Boston: South End Press, 1983.

⁹ Condoleezza Rice. "Campaign 2000: Promoting the National Interest." Foreign Affairs 79, no. 1, January-February 2000.

of superiority. The withdrawal from the ABM treaty signified one of the first, and most worrisome signs, because it eliminated the essential foundation of strategic arms control and opened up the possibility for offense-defense dynamics to resurface.

Moscow's obstinate resistance

Russia's reluctance to accept American explanations for changing existing security mechanisms and willingness to violate arms control agreements stems from its perception of status loss after the fall of the Soviet Union. It does not see itself as an equal partner. The U.S. withdrawal from the ABM and INF treaties in 2002 and 2019 respectively and deployment of the ballistic missile defense system were perceived as signs of its lack of respect towards Russia, the troubled former superpower. Despite having lost much of the Soviet Union's economic and technological strength, Russia remains a nuclear superpower and it regards arms control as one of the few arenas that can help it pursue parity with the United States on the global stage and return some of its Cold War prestige. 10 The withdrawal from several arms control treaties have reinforced to the Russians the idea that America disregards its relevance in international politics. The White House's reluctance to engage in arms control has created a sense of hopelessness in Moscow. "Because this issue is very much politicized, this hinders any breakthroughs," Victor Mizin of Moscow State Institute for International Relations lamented in Moscow in November of 2019. "We understand that the hands of the Trump Administration are now tied because of domestic political problems, and the coming presidential elections. Unfortunately, there are no moves to prolong the new START treaty because...there are no signals from the Trump Administration — even before Mr. Bolton left — [that] breakthroughs are achievable."11

Furthermore, Russia interprets the recent complications in arms control as evidence that the United States is seeking to gain undisputed strategic superiority. When Bush insisted on renegotiating the ABM treaty in response to the growing threat from nuclear proliferators such as Iran and North Korea, the Russian leadership mistrusted him. It claimed that the U.S. could use its superior defense and offensive systems, technologies that Moscow was struggling to maintain, against Russia. 12 Today, President Putin perpetuates the narrative of mistrust and criticizes Gorbachev for "naively believing that he could trust the Americans." 13 He states that Russia remains interested in additional limits

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¹⁰ For more insight into Russia's contention with the American version of the end of the Cold War see, Alexey Miller and Fedor Lukyanov. "Otstranennost vmesto konfrontatsii: post-evropeyskaya Rossiya v poiskakh samodostatochnosti" ("Distancing instead of confrontation: post-European Russian in search for self-sufficiency"). SVOP (Russian Council for Foreign and Defence Policy), 2016.

¹¹ Victor Mizin, deputy director at Independent Institute for Strategic Evaluation and a member of independent trilateral Russian-U.S.-German academic Deep Cuts Commission on international security and arms control. Interview by authors, of Moscow State Institute for International Relations, Moscow, November 2019.

¹² Alexander Nikitin. Interview.

¹³ Putin has expressed this opinion on many occasions, most notably in Oliver Stone's film about the Russian President, later transcribed and published in Stone, Oliver. *The Putin Interviews*. New York: Simon & Schuster, 2017.

on nuclear arms, but since 2011 its position on limiting U.S. missile defenses has hardened. Russia appears to want legally-binding limits on missile defenses, but the Trump administration has refused to negotiate such limits. 14 The Kremlin's disagreement with arms control agreements has led it to readily violate terms, such as the development and deployment of the 9M729 missile system, when it sees it in its interests. 15

Generational change

While the end of the Cold War made it possible for the leaders of the United States and Russia to cooperate on nuclear security to a remarkable degree, the end of this political and ideological standoff also diminished fears of nuclear confrontation and the need for arms control to regulate competition. Since the stakes seem much lower, the foreign policy establishments in both countries have less urgency to come to the arms control negotiating table and agree to further cuts of their arsenals. This false sense of security with nuclear deterrence is arguably a more dangerous position than Cold War posturing. As former U.S. Defense Secretary William Perry put it, "the world is sleepwalking into a nuclear world."16

In addition to an alarming level of complacency about their excessive nuclear stockpiles, both Putin and Trump have undertaken expensive modernization programs that are worryingly reminiscent of the Cold War arms race. But in contrast to that relatively simple era of quantitative competition, today the countries are making qualitative improvements to their arsenals by improving the technological sophistication of their offensive and defensive systems and developing low-yield options. Cold War strategic stability was a numbers game: if each side had sufficient forces to inflict a devastating retaliatory blow following a first-strike nuclear attack, the situation was said to be stable. Today, the strategic model is multi-player (involving China and other nuclear powers) and multi-domain (factoring in new technologies). This development will make the task of sustaining strategic competition more complicated and risk instability as each side loses sense of the other's capabilities and begins to plan for worst-case scenarios.17

The Russian ex-diplomats the authors interviewed, including Evgeny Zvedre of the Moscow State Institute for International Relations, also argue that the loss of the arms control community, and with it experts in arms control, has contributed to complacency

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¹⁴ Office of the Secretary of Defense, 2019 Missile Defense Review, Washington, D.C.: Department of Defense, 2019. https://www.defense.gov/Portals/1/Interactive/2018/11-2019-Missile-Defense-Review/The%202019%20MDR_Executive%20Summary.pdf

¹⁵ Pifer. "With US-Russian Arms Control Treaties on Shaky Ground, the Future is Worrying."
16 William J. Perry. "Andrew Carnegie Lecture on Conflict Prevention in honor of David Hamburg," New York: Foreign Policy Association, November 4, 2017.

¹⁷ Eugene Rumer. "A Farewell to Arms...Control." Washington, D.C.: Carnegie Endowment for International Peace, April 17, 2018. https://carnegieendowment.org/2018/04/17/farewell-to-arms-.-.-control-pub-76088

about the dangers of lowering the thresholds for nuclear use. 18 During the Cold War, thousands of hours of negotiating time were expended trying to limit nuclear weapons and mechanisms were in place to maintain an open dialogue. The Standing Consultative Commission served, in particular, as an indispensable channel of communication even when diplomatic initiatives broke down at the presidential level. 19 However, with arms control out of fashion, commissioners cannot do their job and work to resolve compliance problems.

V. Recommendations

The final section of this paper presents recommendations for renewed dialogue and cooperation in the nuclear sphere, drawing on the historical lessons we have learnt from our research and shining light on present policy opportunities. We found three main lessons from history which should be applied to the current situation: political will and interpersonal dialogue, greater transparency, and the incorporation of the scientific community into the dialogue. For arms control to thrive in the future, we need all of these facets to function.

Lesson 1: Interpersonal dialogue

Political will on the part of leaders, especially the heads of state, in Moscow and Washington is a vital condition for positive developments in arms control. It arises from trust, transparent calculations of security and strategic stability, as well as concerns about the cost of nuclear weapons. Good relations between American and Russian presidents have been critical for both sides to negotiate an agreement and comply with the treaty, once signed and entered into force. Through the 1990s, past lines of dialogue between individual leaders, such as Gorbachev and Reagan, increased trust and communication between scientific communities. In an interview with the authors, former Deputy Secretary General of NATO Rose Gottemoeller said that she is "optimistic about the near-future of arms control" because "great power leadership at the highest level has proven to push through bureaucracy and achieve sudden breakthroughs."20 So far, Trump and Putin seem willing, at least, to talk about nuclear security issues and interested in boosting their legacy with an arms control deal. With their upcoming elections, the extension of New START for an additional five years offers the easiest and most logical way to achieve this. If it lapses without an extension or replacement, we would lose the last legally-binding constraints on the world's two largest nuclear arsenals. Trump and Putin could agree to

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¹⁸ Evgeny Zvedre. High-ranking member of the Soviet negotiation team for the START Treaty and a Deputy Chairman of the Permanent Commission for the ABM Treaty. Interview with the authors, November 2019, Moscow.

¹⁹ Sidney N. Graybeal, and Michael Krepon. "Making Better Use of the Standing Consultative Commission," 10, no. 2 (2011):183-99; Lever, Paul, "The Cold War: The Golden Age of Arms Control," Cold War History 14, no. 4 (2014): 501-13.

²⁰ Rose Gottemoeller. Frank E. and Arthur W. Payne Distinguished Lecturer at the Freeman Spogli Institute for International Studies and Center for Security and Cooperation at Stanford University. Interview with the authors, April 2020, Stanford.

continue with the treaty's limits or to a modest cut in each other's strategic deployed arsenal, for example from 1,550 warheads to 1,200. Washington and (to a lesser degree) Moscow have indicated their interest in bringing China into a multilateral arms control negotiation, but Beijing will not participate until the gap between its arsenal and that of the nuclear superpowers narrows.21 This small breakthrough would come at an opportune moment given the postponement of the Non-Proliferation Treaty Review Conference. Its extension would remove a roadblock to diplomatic progress with nuclear proliferators, who accuse Moscow and Washington of nuclear hypocrisy, as well as non-nuclear weapon states, who condemn both capitals for resuming a dangerous nuclear competition.

Lesson 2: Greater transparency

Greater transparency about the evolving security environment from both countries' perspectives will stabilize uncertainty problems and security dilemmas. The decline in U.S.-Russian cooperation in the nuclear sphere results not only from hostile relations, but from misunderstanding each other's security agenda. Misbehavior and aggression towards the United States alone does not explain Russian violation of the INF treaty in its development of the 9M729 missile. The Russian Ministry of Defense and military industry also wanted to develop a more flexible missile system to shield it from new threats, including U.S. systems, China's rising power, and weapons proliferation in neighboring countries.22 To create greater transparency about their respective nuclear postures and doctrines, we recommend American and Russian officials resume regular, high-level consultations on strategic stability, which served as a valuable channel of communication between the countries during the Cold War. Such consultative meetings would help to understand the motivations and rationale of the other side and, most importantly, see where their security interests align. For example, the United States wants to resolve concerns about Russian compliance and gain greater transparency about their doctrine of "escalate to de-escalate," while Russia wants to clarify the differences between permitted and prohibited missiles. Likewise, Washington wants to bring nonstrategic nuclear weapons and reserve strategic warheads into the negotiations, whereas Moscow prioritizes constraining missile defenses and precision-guided conventional weapons.23 The countries have numerous competing interests, but the past record demonstrates it is possible for them to reconcile their goals on arms control.

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²¹ Pifer. "Russia's shifting views of multilateral nuclear arms control with China." Washington, D.C: Brookings Institute, February 19, 2020. https://www.brookings.edu/blog/order-from-chaos/2020/02/19/russias-shifting-views-of-multilateral-nuclear-arms-control-with-china/

²² Kelly Devens. "Assessing Russian Noncompliance in the Intermediate-Range Nuclear Forces Treaty," undergraduate honors thesis, Stanford University, Center for International Security and Cooperation Honors Thesis, April 30, 2020. Presentation.

²³ Pifer. "The Future of U.S.-Russian Arms Control," Washington, D.C.: The Carnegie Endowment for International Peace, February 26, 2016. https://carnegieendowment.org/2016/02/26/future-of-u.s.-russian-arms-control-pub-62899.

Lesson 3: Incorporate the scientific communities

The successful formula of arms control in the 1990s shows that scientists also play an equally important role. Gottemoeller, for example, cited the successes that were achieved in close cooperation with the scientific community during the Clinton administration, such as the withdrawal of nuclear weapons from the former Soviet states; safe protection, control and accounting of nuclear weapons and fissile material in Russia; and joint work on warhead reductions and transparency.24 At the same time, the Russian Academy of Sciences played an important role both as a facilitator of the National Research Council's interaction with Russian ministries and other organizations within and outside academia. Today, as in the past, it is vital to incorporate the scientific communities in the arms control process, since they are removed from the drama of geopolitics and have the expertise to make informed recommendations.

VI. Conclusion

This exercise in applied history demonstrates that nuclear cooperation between the United States and Russia during times of hostility is not only necessary, but achievable. Even when the countries were intensely mistrustful of one another during the late Cold War, they managed to find a place for arms control. This cooperation in the nuclear sphere underscores positive examples of dialogue and complicates the existing narrative of the United States and Russia in a never-ending collision. Fruitful cooperation took place from 1986 through the 1990s, the Golden Age of Arms Control, when political will from the heads of states, active work on behalf of scientists, and security agendas coalesced to build trust and achieve remarkable breakthroughs in arms control. However, that end-of-Cold War momentum came to a halt following the flare up of a series of disputes, the onset of complacency about lowering the threshold for nuclear use, and diminishing desire for complying with and preserving arms control treaties. The international community has meanwhile looked on in horror as it witnesses the erosion of a crucial bilateral framework for managing political and military disagreements.

While nuclear cooperation does not exist in a vacuum, the past record demonstrates that political opposition alone does not close off all possibilities for arms control. However much the United States and Russia disagree, they share, at the very least, a continued interest in avoiding a nuclear war or nuclear crisis. This final thread has been enough to keep President Trump and President Putin and their top diplomats in dialogue about arms control. Presently, extending New START offers the most feasible way for them to salvage the bilateral arms control framework. In the future, however, the United States and Russia need to create a new approach to arms control that better suits the evolving security landscape and aligns more closely with their respective interests. Washington's unwillingness to preserve arms control agreements and Moscow's reluctance to comply with them suggests that both see the current framework as part of a bygone era of bipolar

²⁴ Gottemoeller. Interview.

competition, outdated and at odds with their new security interests. A new framework needs to expand the conversation to include more players, such as nuclear powers like China, as well as more domains, including missile defense, conventional strike, hypersonics, cyber, and space. If future arms control experts do not envision a more up-to-date model for stability and nuclear cooperation, arms control as a diplomatic tool could be rendered obsolete altogether. Such a prospect will only make our world more unstable and dangerous.

Acknowledgements

The authors are grateful to Amy F. Woolf and Steven Pifer for their helpful comments and detailed feedback on drafts of this paper, as well as to David Holloway for sharing his expertise on nuclear history. The authors are solely responsible for its contents.

Bibliography

Interviews

Mizin, Victor. Deputy director at Independent Institute for Strategic Evaluation and a member of independent trilateral Russian-U.S.-German academic Deep Cuts Commission on international security and arms control. Interview by authors, of Moscow State Institute for International Relations, Moscow, November 2019.

Nikitin, Alexander. Professor of the Political Science department of the Moscow State Institute of International Relations (MGIMO). Interview with authors. November 2019, Moscow.

Gottemoeller, Rose. Frank E. and Arthur W. Payne Distinguished Lecturer at the Freeman Spogli Institute for International Studies and Center for International Security and Cooperation. Interview with the authors, April 2020, Stanford.

Saveliev, Alexander. Head of the Strategic Studies Department, Center for International Security, Institute of World Economy and International Relations (IMEMO), participant in Soviet-American START-1 negotiations (Defense and Space Talks) representing the Academy of Sciences as an Adviser to the Soviet Delegation. Interview with the authors. November 2019, Moscow.

Woolf, Amy F. Specialist in Nuclear Weapons in the Foreign Affairs, Defense, and Trade Division of the Congressional Research Service at the Library of Congress. Interview with the authors December 2020, Stanford, United States.

Zvedre, Evgeny. High-ranking member of the Soviet negotiation team for the START Treaty and a Deputy Chairman of the Permanent Commission for the ABM Treaty. Interview with the authors. November 2019, Moscow.

Published Sources

- Chernyaev, Anatoly S. *My six years with Gorbachev*. Trans. and ed. Robert D. English and Elizabeth Tucker. University Park, PA: Pennsylvania State University Press, 2000.
- Devens, Kelly. "Assessing Russian Noncompliance in the Intermediate-Range Nuclear Forces Treaty," undergraduate honors thesis, Stanford University, Center for International Security and Cooperation Honors Thesis, April 30, 2020. Presentation.
- Graybeal, Sidney N. and Michael Krepon. "Making Better Use of the Standing Consultative Commission," 10, no. 2 (2011):183-99
- Hecker, Siegfried S., ed. *Doomed to Cooperate: How American and Russian Scientists Joined Forces to Avert Some of the Greatest Post-Cold War Nuclear Dangers*. Los Alamos, NM: Bathtub Row Press, 2016.
- Lever, Paul. "The Cold War: The Golden Age of Arms Control," Cold War History 14, no. 4 (2014): 501-13.
- Miller, Alexey and Lukyanov, Fedor. "Otstranennost vmesto konfrontatsii: postevropeyskaya Rossiya v poiskakh samodostatochnosti" ("Distancing instead of confrontation: post-European Russian in search for self-sufficiency"). SVOP (Russian Council for Foreign and Defence Policy), 2016.
- Office of the Secretary of Defense, 2019 Missile Defense Review, Washington, D.C.: Department of Defense, 2019. https://www.defense.gov/Portals/1/Interactive/2018/11-2019-Missile-Defense-Review/The%202019%20MDR_Executive%20Summary.pdf
- Perry, William J. "Andrew Carnegie Lecture on Conflict Prevention in honor of David Hamburg," New York: Foreign Policy Association, November 4, 2017.
- Pifer, Steven. "The Future of U.S.-Russian Arms Control," Washington, D.C.: The Carnegie Endowment for International Peace, February 26, 2016. https://carnegieendowment.org/2016/02/26/future-of-u.s.-russian-arms-control-pub-62899.
- "With US-Russian arms control treaties on shaky ground, the future is worrying." Washington, D.C: Brookings Institute, April 29, 2019. https://www.brookings.edu/blog/order-from-chaos/2019/04/25/nuclear-security-arms-control-and-the-us-russia-relationship/
- Podvig, Pavel. "Russia's current nuclear modernization and arms control." *Journal for Peace and Nuclear Disarmament* 1, no. 2 (2018): 256-267.
- Rice, Condoleezza. "Campaign 2000: Promoting the National Interest." *Foreign Affairs* 79, no. 1, January-February 2000.
- Rumer, Eugene. "A Farewell to Arms...Control." Washington, D.C.: *Carnegie Endowment for International Peace*, April 17, 2018.

https://carnegieendowment.org/2018/04/17/farewell-to-arms-.-.-control-pub-76088

Sanders, Jerry. *Peddlers of crisis: the Committee on the Present Danger and the politics of containment*. Boston: South End Press, 1983.

Stone, Oliver. The Putin Interviews. New York: Simon & Schuster, 2017.