

SYMPOSIUM

Nuclear Arms Control: Coming Back from Oblivion, Again

Dakota S. Rudesill*

INTRODUCTION

As tensions between the United States and Russian Federation have spiraled in recent years, the outlook for the bilateral nuclear arms control regime has become increasingly grim. Comparisons to the early 1980s Cold War are common. Now, as then, Washington and Moscow are geopolitical adversaries. A key arms control agreement has been abandoned. Nuclear modernization accelerates. Old nuclear hands warn that the potential for nuclear war is rising. Amid growing unease, practitioners and commenters debate nuclear policy priorities, how the arms control process might resume, and how best to reduce nuclear risks.

This essay analyzes the comparison of our present moment of nuclear destabilization with the Cold War's frigid and perilous depths in the early 1980s. It argues that the analogy is not perfect, but it is instructive. The Cold War teaches us that nuclear arms racing is hazardous and that nuclear arms control can come back from oblivion. By focusing on the right priorities – strategic stability in particular – and generating ideas now, a pragmatic slate of actionable stability-enhancing proposals can be ready when the geopolitical currents change and prospects for nuclear arms control recover.

I. THE COLD WAR COMPARISON

The nuclear age was nearly four decades old when “The Day After” aired in November 1983. The public was accustomed to hearing about nuclear dangers, but the TV movie had a powerful impact thanks to its major-network billing and depiction of average people dying in a mid-American town.¹ Thirty-five years later came another unsettling nuclear “day after:” rising concern about nuclear

* Assistant Professor, Moritz College of Law, and Affiliated Faculty, Mershon Center for International Security Studies, The Ohio State University. This essay is based on the author's remarks at the *J. Nat'l Security L. & Pol'y* 2019 symposium, “The Continuing Threat of Nuclear Weapons,” held at the Georgetown University Law Center. I thank the conference's organizers and participants for a stimulating discussion, and especially co-panelists Bonnie Jenkins, Michael Krepon, and Adam Scheinman. I thank the *Journal's* able editors for their patience and good work. For research assistance I thank Krystina Garabis, Brandon Miller, Erin Reinke, and Michael Walsh. I am responsible for all content and any errors. The views expressed here are mine and do not imply endorsement by the Office of the Director of National Intelligence nor any other U.S. Government agency. © 2020, Dakota S. Rudesill.

1. See Dawn Stover, *Facing Nuclear Reality: 35 Years After “The Day After”*, BULL. ATOMIC SCIENTISTS (2018), <https://perma.cc/EC67-E8RH>.

arms racing that followed the Trump Administration's October 2018 decision to withdraw from the landmark 1987 Intermediate-Range Nuclear Forces (INF) Treaty, after years of Russian violations.² The historical echoes continued as discussion of non-extension of the last remaining bilateral nuclear arms treaty, the 2010 New Strategic Arms Reduction Treaty (New START) accord on strategic (long-range) nuclear forces, quickly followed the INF withdrawal announcement. These events recalled the collapse of negotiations on the first START accord in December 1983, mere weeks after the TV movie aired.³

Some experts warn that the risk of employment of nuclear weapons may now be greater than in 1983, perhaps higher than at any moment since the Cuban Missile Crisis of 1962.⁴ But is the Cold War really back?⁵ Does the comparison to the early 1980s work? Comparing the two moments of rising nuclear risks demonstrates that there is enough that is similar and different that Washington and Moscow should adopt an agenda that is at once old and new. The two top nuclear powers should focus on strategic stability, extend New START, and prepare for arms control's eventual resumption by generating workable ideas now.

A. Similarities

Recent months saw the thirtieth anniversary of the Berlin Wall's demise. Yet it has been hard not to regard our moment with a sense of tragedy and regret about what could have been. A corner has been turned from the "post-Cold War world." In recent years, the list of ways in which our time looks like the early 1980s Cold War has started to get long. We can organize the similarities under headings of geopolitics, nuclear force modernization and doctrine, and arms control.

1. Geopolitics

In the preface to the Trump Administration's 2018 Nuclear Posture Review (NPR), then-Defense Secretary James Mattis observed that Moscow has made a "decided return to Great Power competition."⁶ This characterization of the

2. See Treaty on the Elimination of Intermediate-Range and Shorter-Range Missiles, U.S.-USSR, Dec. 8, 1987, 100 U.S.T. 1 [hereinafter INF Treaty]; Steven Pifer, *The Trump Administration is Preparing a Major Mistake on the INF Treaty*, BROOKINGS (Oct. 19, 2018), <https://perma.cc/LLG7-JH6N>.

3. See Treaty on Measures for the Further Reduction and Limitation of Strategic Offensive Arms, U.S.-Russ., Apr. 8, 2010, T.I.A.S. No. 11-205 [hereinafter New START]; William Drozdiak, *Soviets Halt Strategic Arms Talks*, WASH. POST (Dec. 9, 1983), <https://perma.cc/UD7P-7TWF>.

4. See, e.g., Ernest J. Moniz & Sam Nunn, *The Return of Doomsday: The New Nuclear Arms Race – and How Washington and Moscow Can Stop It*, 98 FOREIGN AFF., Sept.–Oct. 2019 (noting that the risk of nuclear employment is the highest since the Cuban Missile Crisis in 1962).

5. See, e.g., Brian D'Haeseleer, *Did Barack Obama, not Donald Trump, launch the new cold war?*, WASH. POST (Sept. 18, 2019, 6:00 AM), <https://perma.cc/P7ZU-5XJU> (applying a Cold War analogy); Michael E. O'Hanlon & Sean Zeigler, *No, We Aren't on the Brink of a New Cold War with Russia and China*, BROOKINGS (July 13, 2019), <https://perma.cc/5SCC-ZF9Y> (criticizing a Cold War analogy).

6. See U.S. DoD, NUCLEAR POSTURE REVIEW 1 (2018), <https://perma.cc/3HT3-UQZK> [hereinafter 2018 NPR].

international security environment is contested.⁷ Even so, the undeniable deterioration in relations between Russia and the U.S.-led North Atlantic Treaty Organization (NATO) was long in coming and signposted by Kremlin use of force. In the same way that the Soviet invasion of its neighbor Afghanistan in 1979 marked the end of the intra-Cold War period of lower tensions known as Détente,⁸ Russia's invasions of neighboring Georgia in 2008 and Ukraine in 2014 (to include annexation of Crimea) meant the acrimonious end of hope during the George W. Bush and Obama Administrations, respectively, for friendlier relations.⁹ As before, the Kremlin has since been engaged in a protracted low-intensity conflict against U.S.-aided local forces.¹⁰ As before, there has been potential for escalation and direct conflict between the armed forces of Washington and Moscow, and concern that the Kremlin may turn its forces next to an attack on NATO states.¹¹ In the Middle East, the two powers have backed warring

7. See, e.g., Michael J. Mazarr, *This is Not a Great-Power Competition*, FOREIGN AFF. (May 29, 2019), <https://perma.cc/A7FB-7F5H>.

8. See RAYMOND L. GARTHOFF, DÉTENTE AND CONFRONTATION: AMERICAN-SOVIET RELATIONS FROM NIXON TO REAGAN 1130, 1156-57 (rev. ed. 1994) (discussing the role of the Soviet invasion of Afghanistan in the demise of Détente).

9. In the wake of tensions with Russia during the 1999 Kosovo War and rising Washington-Moscow acrimony, the George W. Bush Administration attempted a reset of its own. The "New Relationship" was reflected in a 2002 strategic arms treaty. See Strategic Offensive Reductions Treaty, U.S.-Russ., May 24, 2002, S. TREATY DOC. No. 107-8 (2002). Called the Moscow Treaty or SORT, this short agreement provided that on Dec. 31, 2012, each state would declare that its operationally deployed strategic warheads numbered 1,700 to 2,200. *Id.* The agreement would then expire. The SORT kept arms control alive but allowed the sides to configure their forces as they pleased and provided no inspection regime. Washington-Moscow relations worsened quickly after SORT was concluded. Contributing factors included disagreements about the 2003 U.S. invasion of Iraq, continued expansion of NATO into the former Soviet empire, and Russia's turn toward authoritarianism. The New Relationship's failure was laid bare when Russia conducted cyber attacks on Estonia in 2007 and invaded Georgia in 2008. For discussion, see Peter Baker, *The Seduction of George W. Bush*, FOREIGN POL'Y (Nov. 6, 2013, 12:49 AM), <https://perma.cc/H34S-MG7X>. The Obama Administration's efforts at a post-Georgia war "reset" yielded the 2010 New START nuclear arms treaty but little other Russian reciprocation. See New START, *supra* note 3; Nini Arshakuni, Angelina Flood & Natasha Yefimova-Trilling, *Why the 'Reset' Didn't Last*, RUSS. MATTERS (Mar. 8, 2019), <https://perma.cc/U85P-UDVT> (commenting on the impact of Russia's invasion of Ukraine on bilateral relations).

10. The U.S. aid to the Mujahideen fighters in Afghanistan was covert, while U.S. aid to Ukraine has so far been overt on the public record. See GEORGE CRILE III, CHARLIE WILSON'S WAR: THE EXTRAORDINARY STORY OF THE LARGEST COVERT OPERATION IN HISTORY 78, 214-15, 261-63 (2003) (decribng the provision of covert aid to Afghan rebels); CORY WELT, CONG. RESEARCH SERV., R45008, UKRAINE: BACKGROUND, CONFLICT WITH RUSSIA, AND U.S. POLICY 29-32 (Sept. 19, 2019), <https://perma.cc/2DL3-9H5K> (summarizing U.S. aid to Ukraine).

11. Russia has espoused a willingness to use force to protect Russians and Russian-speakers in neighboring states, which echoes the Brezhnev Doctrine: the Soviet policy of willingness to use force to prevent Soviet satellites from drifting out of the Kremlin's orbit. The Doctrine was consistent with the Soviet invasions of Hungary, Czechoslovakia, and Afghanistan. See GARTHOFF, *supra* note 8, at 755, 1037-38. The current Russian policy is more worrisome because NATO expansion to include former Soviet republics in the Baltics has brought many Russians and Russian speakers inside NATO. The Russian populations of the Baltic countries are approximately: Estonia 25 percent, Latvia 25 percent, and Lithuania 5.8 percent. See *The World Factbook*, U.S. CENTRAL INTELLIGENCE AGENCY, <https://www.cia.gov/library/publications/resources/the-world-factbook/> (data available via use of the names of the Baltic states as search terms). Russian military operations against any NATO state would trigger the

factions in Syria's bloody civil war – and unlike in most of the Cold War's proxy wars, Washington and Moscow have overtly used force themselves.¹² Meanwhile, the spy war – the confrontation between Kremlin and Western intelligence services – has rebounded to its former levels of intrigue and lethality.¹³ The KGB's successor (the FSB) and its Defense Ministry counterpart (the GRU) are again top counter-intelligence priorities of the U.S. intelligence apparatus, and have carried out a campaign of assassinations on NATO soil in recent years. The Kremlin's espionage apparatus has revived its “active measures” efforts to compromise U.S. elections and disrupt U.S. domestic tranquility – to potentially unprecedented effect, thanks to the Internet and the increasingly sensationalistic American political culture.¹⁴

The Washington-Moscow bilateral geopolitical competition is once again importantly and disturbingly nuclear. The two nuclear peers still hold the majority of the world's atomic arsenal. Rehearsal of nuclear combat has resumed a prominent place in military exercises. We now know that the Soviets nearly mistook NATO's Able Archer 83 exercise – which included nuclear units and planned participation of national leadership – as cover for a NATO first strike.¹⁵ In recent years, NATO has carefully watched major Russian combined-arms exercises that have rehearsed use of nuclear weapons against member states and NATO associate Sweden.¹⁶ Both nuclear superpowers have revived Cold War-era training missions that bring their nuclear-capable aircraft and naval vessels

Alliance's Article V commitment obligating every member to defend all others. See North Atlantic Treaty art. 5, Apr. 4, 1949, 63 Stat. 2241, 34 U.N.T.S. 243.

12. See, e.g., Barbara Starr & Ryan Browne, *US Conducts Airstrike on Weapons Storage Site as Troops Pull Out of Syria*, CNN (Oct. 16, 2019, 7:29 PM), <https://perma.cc/LC34-PJD2> (example coverage of overt U.S. military action); Evan Hill & Christiaan Triebert, *12 Hours. 4 Syrian Hospitals Bombed. One Culprit: Russia.*, N.Y. TIMES (Oct. 13, 2019), <https://perma.cc/63DV-UZNM> (example coverage of overt Russian military action in Syria, which has raised particular concern about knowing or reckless disregard for the law of armed conflict).

13. See Madeline Roache, *Russia Was Linked to 14 Deaths in the U.K., But Britain Looked Away. A New Book Explores Why*, TIME (Nov. 2, 2019) (journalist investigation of deaths in the U.K. where there are signs of involvement of Russian security services).

14. See ROBERT D. BLACKWILL & PHILIP H. GORDON, COUNCIL ON FOREIGN RELATIONS SPECIAL REPORT NO. 80: CONTAINING RUSSIA 3 (Jan. 2018), <https://perma.cc/PTC3-MTMA> (discussing election interference as part of the larger geopolitical challenge from Russia); *Worldwide Threat Assessment of the US Intelligence Community Before S. Select Comm. on Intelligence*, 116th Cong. 6-9, 13-14 (Jan. 29, 2019) (statement for the record of Daniel R. Coats, Director of Nat'l Intelligence on Russian operations), <https://perma.cc/Q6PB-5WHY> (view of U.S. intelligence community); Judy Woodruff, *Russia 'Turned' Election for Trump, Clapper Believes*, PBS.ORG (May 23, 2018) (former Director of National Intelligence personally believes that Russian election interference was decisive in close 2016 presidential race).

15. See *Able Archer 83 Sourcebook*, NAT'L SECURITY ARCHIVE, <https://nsarchive.gwu.edu/project/able-archer-83-sourcebook> (last visited Nov. 6, 2019) (collecting historical documents and analyses); see also MARC AMBINDER, *THE BRINK: PRESIDENT REAGAN AND THE NUCLEAR WAR SCARE OF 1983* (2018) (investigative journalist account of near-war during the Able Archer 83 exercise).

16. See Robin Emmott & Andrius Sytas, *Russia's Zapad War Games Unnerve the West*, REUTERS (Sept. 13, 2017, 9:36 AM), <https://perma.cc/NH2U-RHDN>; Damien Sharkov, *Russia Practiced Nuclear Strike on Sweden: NATO Report*, NEWSWEEK (Feb. 4, 2016, 3:46 AM), <https://perma.cc/9SRK-SH97>.

close to the other's territory, waters, and airspace.¹⁷ Whereas on Sept. 11, 2001, both sides cancelled nuclear exercises that were underway, Russian President Vladimir Putin has indicated that he was willing and ready to order a nuclear alert during Russia's 2014 invasion of Ukraine.¹⁸ Putin here was reviving nuclear signaling: sending a message of resolve through force posture changes or statements regarding nuclear arms. The ready precedent was the U.S. nuclear alert during the 1973 Arab-Israeli war, meant to dissuade Kremlin intervention.¹⁹ Meanwhile, both Putin and U.S. President Donald Trump have made nuclear saber rattling a feature of nationalist political rhetoric.²⁰

2. Nuclear Forces

The notions that an expensive nuclear arms race must be run or that nuclear employment can lead to military victory sound to many ears like Cold War anachronisms. With echoes of Cold War claims of bomber and missile gaps, however, this kind of thinking is back. To their credit, Presidents Putin and Trump at times condemn nuclear weapons and disclaim interest in arms racing, call for further force reductions, and have indicated interest in a nuclear arms deal that includes China and perhaps other powers.²¹ Then-Secretary Mattis's testimony to Congress on behalf of new nuclear hardware was decidedly reluctant.²²

17. See Hans M. Kristensen & Matt Korda, *United States Nuclear Forces, 2020*, 76 BULL. ATOMIC SCIENTISTS 46, 50-51 (2020) (U.S. nuclear exercises in 2019 involved bomber operations in the European theater that the Air Force observes "have not been done since the Cold War ended," involved a large flight of B-52H bombers to the eastern Baltic Sea, B-52H flights over Poland and the Arctic near Russian territory, and (for the first time) B-2 stealth bomber operations over the Arctic); Zachary Cohen & Ryan Browne, *US Fighter Jets Intercept Russian Bombers Near Alaska*, CNN (Aug. 9, 2019, 5:29 AM), <https://perma.cc/GND7-2XXP> (reporting that Russian nuclear-capable bombers flew near U.S. airspace).

18. See William M. Arkin & Robert Windrem, *Secrets of 9/11: New Details of Chaos, Nukes Emerge*, NBC NEWS (Sept. 11, 2016, 10:53 AM), <https://perma.cc/6G4J-GXZW>; *Putin Says Russia Was Ready for Nuclear Confrontation Over Crimea*, REUTERS (Mar. 15, 2015, 7:59 AM), <https://perma.cc/9HTJ-6HUX>.

19. See WALTER ISAACSON, *KISSINGER: A BIOGRAPHY* 530-34 (1992).

20. See, e.g., Ray Sanchez, *Putin Boasts Military Might with Animation of Florida Nuke Strike*, CNN (Mar. 2, 2018, 10:57 AM), <https://perma.cc/X8S8-3HJF> (Putin's State of the Union remarks tout nuclear modernization and include video of simulated nuclear attack on the U.S.); Donald Trump (@realDonaldTrump), TWITTER (Dec. 22, 2016, 8:50 AM), <https://perma.cc/46LP-24YN> ("The United States must greatly strengthen and expand its nuclear capability..."); Michael Crowley, *Trump's North Korea Tweets Shatter Decades-Old Nuclear Taboo*, POLITICO (Jan. 3, 2018, 7:51 PM), <https://perma.cc/BA5H-6P65> (Trump threatens nuclear use more explicitly than predecessors); Melissa Fares, *Trump 'Arms Race' Comment Sows More Doubt on Nuclear Policy*, REUTERS (Dec. 22, 2016, 12:03 PM), <https://perma.cc/WP85-VZLA> (Trump reportedly told journalist "Let it be an arms race. We will outmatch them at every pass and outlast them all.").

21. See, e.g., Vladimir V. Putin, President of the Russian Federation, Remarks to Meeting of the Valdai International Discussion Club, Oct. 27, 2016, <https://perma.cc/96Y4-F44Q> (condemning nuclear weapons); Kingston Reif & Shannon Bugos, *Putin Puts Ball in Trump's Court on New START Extension*, ARMS CONTROL TODAY (Dec. 20, 2019), <https://perma.cc/82RD-E6V9> (Russia open to Trump's interest in including China, but Russia may then want to include the U.S.-allied Britain and France).

22. Jeff Daniels, *Pentagon Chief Sees New Nuclear Missile as Bargaining Chip Against Russians*, CNBC (Feb. 6, 2018, 5:09 PM), <https://perma.cc/BN5Z-YTYN>.

Yet it is clear from both presidential rhetoric and force modernization efforts that a new arms race is at least nascent.

Driven by the classic arms-building motives of perceived security need, prestige, and domestic politics, both sides are making massive investments in all three legs of their respective triads of strategic (long-range) delivery vehicles: bombers, land-based intercontinental ballistic missiles (ICBMs), and submarine-launched ballistic missiles (SLBMs) and their submarines. After vast post-Cold War cuts in the kinds and numbers of warheads and nuclear-capable vehicles, both powers are disregarding the principle of irreversible reductions and are building old and new kinds of weapons.²³ Of special concern in the West have been Russia's now-fielded nuclear-capable cruise missile (which violated the INF Treaty's ban on missiles with ranges of 300 to 3,400 miles), several other nuclear delivery systems under development (including an underwater drone and a nuclear-powered missile), in addition to potential return of tactical (short-range) nuclear weapons to surface ships and attack submarines and retention of a much larger and more diverse tactical arsenal than the United States.²⁴ Russian moves informed the Trump Administration's decisions in its 2018 NPR to field a low-yield warhead for Trident SLBMs in the near term, and over the long term pursue a new nuclear-armed sea-launched cruise missile (SLCM) and a conventional ground-launched cruise missile (GLCM).²⁵ Russia and the United States (and China) are pursuing maneuverable hypersonic warheads.²⁶ Finally, while the United States no longer fields the Cold War's most destabilizing strategic nuclear forces – multiple independently targetable re-entry vehicles (MIRVs) on ICBMs that by concentrating many warheads on single targets arguably create incentives for striking first in a crisis – Russia is relying heavily on MIRVs. Indeed, Russia is

23. See DAVID CLIFF ET AL., VERTIC, IRREVERSIBILITY IN NUCLEAR DISARMAMENT: PRACTICAL STEPS AGAINST NUCLEAR REARMAMENT 5 (2011) (exploring principle of irreversibility and offering recommendations); Hans M. Kristensen & Matt Korda, *Russian Nuclear Forces, 2019*, 75 BULL. ATOMIC SCIENTISTS 73 (2019) (analyzing Russian nuclear modernization); Kristensen & Korda, *United States Nuclear Forces, 2020*, *supra* note 17 (analyzing United States nuclear modernization).

24. See 2018 NPR, *supra* note 6, at x-xii, 8-10. Questions about Russian tactical nuclear arms and its surface and attack submarine fleets have persisted for some time. See, e.g., HANS M. KRISTENSEN, FEDERATION OF AMERICAN SCIENTISTS SPECIAL REPORT NO. 3: NON-STRATEGIC NUCLEAR WEAPONS 59 n.141 (May 2012), <https://perma.cc/Q9G7-U52E> (Russian defense minister in 2006 indicated that some general purpose submarines at sea were nuclear-armed). Similarly, concern about the overall imbalance between U.S. and Russian tactical nuclear arsenals has existed for some time. See Dakota S. Rudesill, *Regulating Tactical Nuclear Weapons*, 102 GEO. L.J. 99, 111-12, 143-61 (2013) (analyzing imbalance and related regulatory efforts).

25. See 2018 NPR, *supra* note 6, at x-xii, 10, 52-56 (discussing modernization programs); Aaron Mehta, *Trump's New Nuclear Weapon has been Deployed*, DEFENSENEWS (Feb. 4, 2020) (lower-yield W76-2 warhead now starting to be operationally deployed).

26. For discussion, see KELLEY M. SAYLER, CONG. RESEARCH SERV., R45811, HYPERSONIC WEAPONS: BACKGROUND AND ISSUES FOR CONGRESS 9-15 (Sept. 17, 2019), <https://perma.cc/DJC8-987L> (all three powers are actively pursuing maneuvering weapons that fly at speeds greater than mach 5 that are launched from ballistic missiles or fly as air-breathing cruise missiles).

building a new 10-warhead “Sarmat” ICBM, dubbed “Satan II” by NATO.²⁷ To hearty applause, during a recent State of the Union address Putin showed a video that depicted this hydra-headed missile showering Florida – home to Trump properties – with warheads.²⁸

After decades of reduced nuclear tensions, concern that the nuclear superpowers may be more willing to use nuclear weapons has been growing. The nuclear sabre rattling and modernization just discussed are part of the reason. Nuclear policy statements by both powers have reflected escalating tensions. Observers disagree about how substantively Russian and U.S. doctrine have truly changed.²⁹ But the anxiety level itself about these matters is telling. For example, although the phrase does not appear in available Russian military doctrine statements, the Trump Administration’s 2018 NPR stressed that the United States is responding to the possibility that Russia believes it can “escalate to de-escalate.” That is, threaten or employ nuclear weapons first to induce an adversary to back down in a conventional conflict.³⁰ A stated purpose of the U.S. modernization effort is to ensure that Russia understands that crossing the nuclear threshold would not be successful and instead be met by retaliation or escalation.³¹ Notable as well is that the U.S. response to Russia’s annexation of Crimea in 2014 reportedly includes a war plan in the European theater that has an enhanced role for U.S. nuclear-capable bombers.³² Neither side has a “no first use” policy, and the Trump Administration has reversed the Obama Administration’s drive to reduce the role of nuclear weapons in U.S. national security policy.³³

27. See Dakota S. Rudesill, *MIRVs Matter: Banning Hydra-Headed Missiles in a New START II Treaty*, 54 STAN. J. INT’L L. 83, 100-1 (2018) (analyzing implications of MIRVs and Russian modernization).

28. See Sanchez, *supra* note 20.

29. Regarding Russia, see AMY F. WOOLF, CONG. RESEARCH SERV., R45861, RUSSIA’S NUCLEAR WEAPONS: DOCTRINE, FORCES, AND MODERNIZATION 3-7, 34-35 (Jan. 2, 2020) (analyzing evidence of Russian doctrinal changes and related debate). See also 2018 NPR, *supra* note 6, at 8-10 (Trump Administration view of changes in Russian doctrine and implications). Regarding the United States, both the Obama and Trump Administrations have included substantively similar language at the center of their nuclear policy statements, particularly about only employing nuclear weapons in extreme circumstances where vital interests are at stake. However, the Trump Administration has explicitly abandoned the Obama Administration’s efforts to reduce the role of nuclear weapons in U.S. security policy and is fielding new systems. See 2018 NPR, *supra* note 6, at 21 (Trump NPR); U.S. DoD, NUCLEAR POSTURE REVIEW vii-viii (2010) [hereinafter 2010 NPR] (Obama NPR).

30. See WOOLF, *supra* note 29, at 6; 2018 NPR, *supra* note 6, at 30. See also Kristen Ven Bruusgaard, *The Myth of Russia’s Lowered Nuclear Threshold*, WAR ON THE ROCKS (Sept. 22, 2017) (skeptical analysis of claim that Russian doctrine anticipates “escalate to deescalate” and lowered threshold for nuclear employment).

31. 2018 NPR, *supra* note 6, at 8-9.

32. See Kristensen & Korda, *United States Nuclear Forces, 2020*, *supra* note 17, at 50-1.

33. See 2018 NPR, *supra* note 6; 2010 NPR, *supra* note 29. Russia abandoned the Soviet Union’s official “no first use” policy in 1993 as its conventional forces disintegrated in the wake of the Soviet Union’s political and economic collapse. See WOOLF, *supra* note 29, at 3-4. The United States has never had such a policy.

3. Arms Control

The early 1980s and recent years stand out as moments of rapid roll-back of prior progress on nuclear arms control. The Soviet invasion of Afghanistan ended Détente and prompted President Carter to pull the second strategic arms limitation treaty (SALT II) from Senate consideration.³⁴ Arms talks went nowhere for years as both sides modernized. Then, as now, modernization by the world's nuclear "haves" is generating criticism from the nuclear "have-nots" under the 1968 Nuclear Non-Proliferation Treaty (NPT) that the "haves" are not honoring their treaty commitment to work toward negotiated nuclear disarmament.³⁵

In recent years, the INF Treaty's formal demise in August 2019 was preceded by suspension of its sibling pillar of post-Cold War European security: the 1990 Conventional Forces in Europe (CFE) treaty that managed the post-Cold War drawdown in the conventional weapons often cited as rationales for tactical nuclear weapons in Europe.³⁶ The 2010 New START treaty – which limits U.S. and Russian strategic delivery vehicles to 700 (operational) to 800 (total), caps deployed strategic warheads at 1,550, and provides verification via intrusive on-site inspections – is the last bilateral nuclear arms limitation treaty in force. U.S. agreement to its five year extension in 2021 is in doubt.³⁷ So too is the future of the 1992 Open Skies Treaty that since the Cold War's end has provided literal

34. See Treaty on the Limitation of Strategic Offensive Arms and Protocol, U.S.-USSR, June 18, 1979, S. TREATY DOC. No. 96-25 (1979) [hereinafter SALT II]. Carter technically requested indefinite postponement of Senate consideration but knew that SALT II now had no hope. For discussion, see GARTHOFF, *supra* note 8, at 1055, 1061-62.

35. See Treaty on the Non-Proliferation of Nuclear Weapons art. VI, July 1, 1968, 21 U.S.T. 483, 729 U.N.T.S. 161 [hereinafter NPT] (Article VI requires all parties to "pursue negotiations in good faith on effective measures relating to cessation of the nuclear arms race at an early date and to nuclear disarmament, and on a treaty on general and complete disarmament"). One of the deals at the core of the NPT was that non-nuclear weapon states (the "have-nots") would forswear nuclear arms if nuclear weapon states (the "haves") would agree to Article VI. Resumed arms racing calls into question the fidelity of the nuclear superpowers to this deal and to their legal obligations. Nuclear arms racing also runs against global efforts toward a treaty "on general and complete disarmament." *Id.* Such an accord was opened for signature in late 2017 and as of the end of 2019 had garnered 34 state parties and 80 signatories. See Treaty on the Prohibition of Nuclear Weapons, Sept. 20, 2017, 729 U.N.T.S. 161. No nuclear weapon state and no NATO member voted for it at the United Nations or has signed the treaty. See also Joint Press Statement from the Permanent Representatives to the United Nations of the United States, United Kingdom and France Following the Adoption of a Treaty Banning Nuclear Weapons (July 7, 2017), <https://perma.cc/Y6FK-AF7H> (announcing intent not to sign the treaty).

36. See Treaty on Conventional Armed Forces in Europe, Nov. 19, 1990, S. TREATY DOC. No. 102-8, 2441 U.N.T.S. 285 [hereinafter CFE Treaty]. Russia suspended its participation in 2007. In response, the United States in 2011 stated it would no longer observe some treaty requirements. In 2015, Russia announced a complete halt to compliance. For discussion, see Kingston Reif, *Russia Completes CFE Treaty Suspension*, ARMS CONTROL TODAY (Apr. 2015), <https://perma.cc/AU97-S9BY> (discussing CFE treaty's equalization of conventional forces, relationship to tactical nuclear weapons in Europe, and related actions by Russia and United States).

37. See Reif & Bugos, *supra* note 21 (Russia willing to extend New START but the United States has not agreed, and U.S. President Trump is interested in bringing China into the U.S.-Russian nuclear arms regime).

transparency by allowing each side to overfly the other.³⁸ The 2018 NPR made explicit reference to the Cold War in arguing that deployment of U.S. Pershing II missiles in Europe in the 1980s resulted in the INF Treaty that banned it and its Soviet counterparts. The Trump Administration's theory appears to be that the path out of nuclear arms racing involves doing it again.

B. Differences

Plainly, there is abundant reason to believe that relations between the nuclear superpowers have returned to early 1980s depths. And, the Trump Administration's analogy to the arms racing that preceded nuclear reduction treaties at the Cold War's end has some intuitive appeal. But the Cold War analogy is imperfect. Our moment of tension is distinct. There is good reason to be skeptical that the old answer of arms racing is the best answer.

1. Geopolitics

As in the early 1980s there are only two nuclear superpowers. But more generally the geopolitical competition is less stark. It is less easy to anticipate, and less symmetrical.

The United States and Russia in global security context are different states but not as different as they were during the Cold War. The bipolar Cold War clash of ideological visions and largely separate socio-economic systems has been replaced by disagreement about Russia's place in the evolving U.S.-built post-World War II international order. Rather than its complete replacement, Russia (like China) seeks a global system with a less powerful United States, a larger security sphere in which the United States has little influence, and more room for authoritarianism, nationalism, and state capitalism. Despite its authoritarianism and worrisome human rights record, Russia today is a much more open society than during the Cold War. Thanks to globalization and the information revolution, Russia is much more integrated economically and culturally with the rest of the world – a world in which the volume, variety, velocity of change is continually increasing. Despite recent tensions, Washington and Moscow know each other better and cooperate in many more ways than they did even at the height of *Détente* in the 1970s.

The international order overall is also no longer bipolar. Whereas once both Washington and Moscow led large blocs, today only the United States leads a sizable alliance bloc and has an expansive global network of security alliances. But neither is the world unipolar, as it was immediately after the Cold

38. See Treaty on Open Skies, Mar. 24, 1992, S. TREATY DOC. NO. 102-37 (1992); Kingston Reif & Shannon Bugos, *U.S. Considers Open Skies Treaty Withdrawal*, ARMS CONTROL TODAY (Nov. 2019), <https://perma.cc/ML7Y-JR2F> (U.S. considering withdrawal but gaining valuable intelligence on Russian forces); David A. Koplow, *Back to the Future and Up to the Sky: Legal Implications of "Open Skies" Inspection for Arms Control*, 79 CAL. L. REV. 421 (1991) (analyzing treaty).

War.³⁹ Multi-polarity is a reality. Power – political, military, and economic – is more widely distributed across the globe than at any point since to World War II. That makes the national security policies of Washington and Moscow matter less in relative terms, and inevitably their nuclear weapons matter less, too, to some unquantifiable degree. China, in particular, is now more powerful than Russia in nearly every respect except the size of its nuclear arsenal – one that China is thoroughly modernizing.⁴⁰

2. Nuclear Forces

In the early 1980s, China had a small strategic nuclear force. To hold at risk targets in the United States, China for decades relied primarily on a limited number of non-alerted ICBMs with high-yield warheads, reflecting a minimum credible deterrence policy.⁴¹ Today, China is a rising nuclear power. Beijing is fielding modern MIRVed missiles on land and its first fleet of ballistic missile submarines.⁴² China's mass production and deployment of short, medium, and intermediate range conventional missiles (which could in theory be loaded with some of the several hundred nuclear warheads China is believed to possess) have provided a rationale for Russian and to some extent U.S. efforts to pursue new systems and break free of the INF Treaty's restrictions.⁴³ It remains unclear if Beijing truly wants more than, first, to hold at risk U.S. conventional forces operating in or near China's sphere of influence (for example, in defense of Taiwan or in the South China Sea), and second, a credible second-strike nuclear capability to reduce the chances China would have to back down in a crisis that goes nuclear.⁴⁴ Even so, China's new hardware makes China a more significant nuclear actor than it was during the Cold War. Its improved forces matter in *absolute* terms to any potential adversary. In *relational* terms they matter because Chinese nuclear modernization could ripple through Asian deterrence relationships and prompt faster modernization by India and in turn by Pakistan. The South Asian powers

39. For an influential contemporary analysis, see Charles Krauthammer, *The Unipolar Moment*, WASH. POST, July 20, 1990 ("world power resides in one reasonably coherent, serenely dominant, entity," the U.S.-led Western Alliance).

40. See Hans M. Kristensen & Matt Korda, *Chinese Nuclear Forces, 2019*, 75 BULL. ATOMIC SCIENTISTS 171 (2019) (discussing Chinese nuclear modernization).

41. See JEFFREY LEWIS, *THE MINIMUM MEANS OF REPRISAL: CHINA'S SEARCH FOR SECURITY IN THE NUCLEAR AGE* (2007) (China for decades maintained a small minimum strategic deterrent, with warheads not loaded on missiles).

42. See Kristensen & Korda, *Chinese Nuclear Forces, 2019*, *supra* note 40. In the early 1980s, China completed a ballistic missile submarine. It was reportedly plagued by problems and is not known to have ever become operational. See LEWIS, *supra* note 41, at 35 (discussing vessel); Robert S. Norris & Hans M. Kristensen, *Chinese Nuclear Forces, 2006*, 62 BULL. ATOMIC SCIENTISTS 60, 61 (2006) (no known operational patrols).

43. See DEF. INTELLIGENCE AGENCY, U.S. DoD, *CHINA MILITARY POWER: MODERNIZING A FORCE TO FIGHT AND WIN* (2019), <https://perma.cc/V9LP-LG3U>.

44. As the Chinese Communist Party has stoked internal nationalist sentiment in recent decades to buttress its hold on power, Chinese officials have become concerned that they could be forced from power if Taiwan declares independence – or otherwise if there is a serious crisis with the United States – and they were seen as backing down. See SUSAN L. SHIRK, *CHINA: FRAGILE SUPERPOWER 2-3* (2007).

did not field nuclear forces 35 years ago. Additional pressure today to modernize could drive dangerous proliferation within Indian and Pakistani arsenals: higher numbers and greater variety in terms of warheads and their delivery systems.⁴⁵ China's nuclear forces matter in *comparative* terms because even a still-smallish Chinese arsenal inevitably matters more now than the United States and Russia scrapped 85 percent of their arsenals after the Cold War.

As noteworthy as modernization in China, Russia, and the United States is, the nascent nuclear arms race lacks the colossal scale that characterized the U.S.-U.S.S.R. nuclear competition. China gives no indication of interest in fielding tens of thousands of nuclear warheads and thousands of missiles. Neither do Russia or the United States, at least so far.

Russia and the United States are modernizing qualitatively, and noisily touting a handful of new kinds of weapons and replacements for aging systems (Russia's "Satan II" heavy ICBM, and planned U.S. replacements for each leg of its strategic triad over the coming decades, for example). Both sides may grow their forces in number to a limited extent, taking advantage of the freedom provided the lack of limits on tactical nuclear weapons, the INF Treaty's demise, and the potential lack of extension of New START. But, to date, the new arms race is a much more limited affair in terms of the number of new nuclear delivery vehicles to be produced, the number of weapons expected to be fielded, and their dollar cost.⁴⁶ With a stagnant economy and constrained production capabilities, Russia may continue to struggle to field strategic forces near New START's caps.⁴⁷ For some time both sides will continue to rely heavily in the field on nuclear delivery systems that will be two to six decades old.⁴⁸

In contrast, in the 1980s both nuclear superpowers were rapidly fielding multiple new systems to replace relatively young hardware.⁴⁹ The Soviet warhead stockpile and spending on U.S. nuclear forces had a similar vector, increasing at a rapid annual pace throughout the first half of the 1980s. Security concern about falling behind (the emergence of a dreaded "gap" in bombers, missiles, or other

45. A nuclear war in South Asia could cause millions of prompt deaths and injuries, and it could produce severe environmental damage and a "nuclear famine" across the globe. See Ira Helfand, *The Humanitarian Consequences of Nuclear War*, 43 *ARMS CONTROL TODAY* 22, 24 (2013).

46. See 2018 NPR, *supra* note 6, at xi (U.S. spent 10.6 percent of its defense budget in the 1980s on nuclear forces; the Trump Administration has sought an increase to 6.4 percent).

47. For discussion of Russia's difficulties matching U.S. strategic forces, see recent and past analyses from Kristensen & Korda and the predecessor team of Kristensen and Robert Norris. See, e.g., Kristensen & Korda, *Russian Nuclear Forces, 2019*, *supra* note 23; Hans M. Kristensen & Robert S. Norris, *Russian Nuclear Forces, 2011*, 67 *BULL. ATOMIC SCIENTISTS* 67 (2011).

48. For example, U.S. ICBMs and B-52H bombers have been in service since the 1960s. See Kristensen & Norris, *United States Nuclear Forces, 2020*, *supra* note 17, at 47 (table of U.S. nuclear forces with deployment dates). Russia has some newer ICBMs and submarines but also relies on ICBMs, bombers, and submarines from the Soviet era. See Kristensen & Norris, *Russian Nuclear Forces, 2019*, *supra* note 23, at 74 (table of Russian nuclear forces with deployment dates).

49. For a contemporaneous discussion that emphasized a potential Soviet lead, see U.S. DoD, *SOVIET MILITARY POWER: AN ASSESSMENT OF THE THREAT 1988* at 98–100 (1988), <https://perma.cc/WTG5-DRN7>.

systems), prestige, and domestic bureaucratic pressures and political incentives combined to drive full-tilt arms racing by both sides. The dynamic reflected the classic security dilemma of one side's action to protect itself driving adversary responses that reduce security, raise concern about adversary attack, and spiral tensions upward. The Cold War's arms racing yielded arsenals that were so massive that nuclear accidents had become altogether too frequent, their fiscal cost had reached unsustainable levels for both parties, anxiety about war and paranoia were growing on both sides, and the inventories themselves if ever employed at scale would produce what was accurately termed "overkill" – and even the end of civilization.⁵⁰ In short, the Cold War experience with nuclear excess exists as a warning rather than a reality that has fully returned, much less one to be repeated.

3. Arms Control

The willful unraveling of the bilateral nuclear arms control regime under Presidents Putin and Trump is regrettable. But the present moment, however dim, remains more favorable than the early 1980s in important respects. One is that as of evaporation of prospects for implementation of the 1979 SALT II strategic arms limitation treaty there was no bilateral agreement in force in the early 1980s that limited the number of offensive arms.⁵¹ Today, the nuclear superpowers retain the option in 2021 of extending the New START treaty to 2026. Second, rather than the 1980s challenge of crafting a first-ever agreement that would provide verification through on-site inspections (and raise classified information protection and legal concerns), New START not only provides such a ready and extendable mechanism but builds on more than three decades of overwhelmingly successful inspection-based bilateral arms control, to include verified weapon destruction.⁵² Our challenge is model extension and perhaps modification, rather

50. The public record reflects multiple serious U.S. nuclear warhead accidents, including warheads falling out of aircraft and otherwise becoming compromised in crashes and explosions. See ERIC SCHLOSSER, *COMMAND AND CONTROL: NUCLEAR WEAPONS, THE DAMASCUS ACCIDENT, AND THE ILLUSION OF SAFETY* 168-70, 184-86, 191, 245-49, 262, 308-11, 327 (2013) (at one point during Cold War a nuclear bomb "had been inadvertently jettisoned once every 320 flights"; over 12 year period "at least 1,200 nuclear weapons had been involved in 'significant' incidents and accidents"). The Soviet military inferentially must have had at least as many accidents, although they are not similarly documented in open sources. Regarding overkill, by the mid-1980s the superpowers had approximately 70,000 nuclear weapons between them. In 2019, the U.S. and Russian arsenals totaled over 10,000 warheads. See Hans M. Kristensen & Matt Korda, *Status of World Nuclear Forces*, FED'N AM. SCIENTISTS, <https://perma.cc/FD9U-PUQG>.

51. The first SALT accord, termed SALT I, was a congressional-executive agreement in force from 1972 to 1977. Interim Agreement on Certain Measures with Respect to the Limitation of Strategic Offensive Arms, U.S.-USSR, May 26, 1972, 23 U.S.T. 3462 [hereinafter SALT I]. The 1972 ABM Treaty remained in force in the 1980s, but limited only defensive missiles designed to destroy incoming warheads. Treaty on the Limitation of Anti-Ballistic Missile Systems, U.S.-USSR, May 26, 1972, 23 U.S.T. 3435 (ABM Treaty). The United States withdrew in 2002. See U.S. Dep't of State, Text of Diplomatic Notes Sent to Russia, Belarus, Kazakhstan and Ukraine (Dec. 14, 2001), <https://perma.cc/6NWK-RSM2>.

52. See David A. Koplów, *Eve of Destruction: Implementing Arms Control Treaty Obligations to Dismantle Weaponry*, 8 HARV. NAT'L SECURITY J. 158, 211-13 (2017) (success of New START treaty);

than model building. Thanks to this experience, the parties know well the benefits of arms control that features both limits and up-close verification: balancing of forces that fosters strategic stability, prevention of arms racing, predictability, detailed knowledge of the forces of the other party, and confidence in compliance.

II. REFLECTION ON THE COLD WAR COMPARISON

The analogy of our time to the early 1980s Cold War is imperfect. It is also instructive. Several conclusions are readily apparent.

First, our current security environment may be more complicated than during the Cold War, but arms control has provided real benefits – and continues to do so. The United States and Russia continue dozens of annual on-site inspections and data exchanges pursuant to New START. Force balancing, predictability, transparency and information gathering, and dissuasion of cheating are enormously important.

Second, there is nothing to suggest that the top priority for all participants in deterrence relationships – and therefore for force modernization and arms control – should be anything other than enhancement of strategic stability.⁵³ In its classic sense, strategic stability means alignment of incentives against shooting first or escalation. In a broader sense, it means alignment of incentives against arms racing and other force or policy moves that could undermine deterrence.⁵⁴

A third conclusion is that arms racing in the 1980s raised urgent, existential questions about adversary intentions and capabilities, and therefore imperiled strategic stability. It could have that cost again if racing fully resumes. Other potential costs include planning difficulties and enormous fiscal expense, at a time of a stagnant Russian economy, and of massive U.S. budget deficits and an historically high defense budget that will inevitably come down.⁵⁵ Racing would also likely drive up the risk of nuclear accidents⁵⁶ – loss of control over warheads, or “leakage” to radicals who might use them for nuclear or radiological terrorism – in view of the engineering principle that the more pieces a system has the greater statistical chance one will fail. Now that China has begun to inch closer to nuclear peer-hood with Russia and the United States, and with potential knock-on

David A. Koplow, *Arms Control Inspection: Constitutional Restrictions on Treaty Verification in the United States*, 63 N.Y.U. L. REV. 229 (1988) (legal issues raised by on-site verification).

53. It is encouraging that the Trump Administration’s State and Defense Departments have stated that they seek strategic stability. See Sec’y of State Michael R. Pompeo & Foreign Minister Sergey Lavrov, Remarks at a Press Availability (Dec. 10, 2019), <https://perma.cc/QU4R-Z9XF> (remarks at joint press conference in Washington, D.C.); 2018 NPR, *supra* note 6, at vi-vii, 26.

54. See Moniz & Nunn, *supra* note 4 (strategic stability broadly includes “processes, mechanisms, and agreements that facilitate the peacetime management of strategic relationships”).

55. See Kate Davidson, *U.S. Deficit Tops \$1 Trillion in First 11 Months of Fiscal Year*, WALL ST. J. (Sept. 12, 2019, 3:29 PM), <https://perma.cc/YSAD-ZV75> (massive deficits); Dan Keeler, *How the Ballooning Federal Debt Threatens U.S. Defense*, BROOKINGS (June 27, 2018), <https://perma.cc/C37Z-KM9T> (high deficits and record debt putting downward pressure on defense budget).

56. For an open source discussion of the history of U.S. nuclear weapon accidents by a journalist, see SCHLOSSER, *supra* note 50.

effects to its deterrence relationships with India and Pakistan, the involvement of China in any fully realized arms race could make that race's trajectory harder to predict. The dynamics could be harder to manage. There is good reason, in short, to be skeptical of arguments that might unleash a full arms race – one that could be expected to self-perpetuate.

The fourth and most encouraging lesson of the early 1980s is that the world can change, and quickly. The world's close call with global thermonuclear war during Able Archer 83, the collapse of arms talks thereafter, rising concern that the other would shoot first, and confrontational attitudes – all of this gave way in a few short years to a general reduction in tensions, multiple arms control agreements (the INF, CFE, and START I accords), the Cold War's end, and the most massive reduction in war-making potential the world has ever known. It took a series of shocks to the system to disrupt the arms race and end the Cold War, particularly the terrifying close call of Able Archer, and new leadership in Moscow. Ascendance of Mikhail Gorbachev in the Soviet Union provided U.S. Presidents Ronald Reagan and George H. W. Bush a partner in managing the Cold War's end.⁵⁷

In view of rising nationalism and accelerating nuclear modernization, more complex international security dynamics, and ongoing collapse of the bilateral nuclear arms control regime, another big shock may be necessary for a nuclear course correction. A terrifying nuclear crisis, and perhaps also new leadership in one or both countries, may again be what it takes for progress on bilateral arms control to be achieved. We should remember, however, that in our time the rate and scope of change seems to accelerate continually. That suggests that current dynamics may be disrupted sooner than expected – for better or for worse.

III. THINKING AHEAD: AN AGENDA

Times are hard for arms control. Time is also precious. Policymakers and thinkers should use this moment to argue for retention of stability-enhancing aspects of the current U.S.-Russian nuclear relationship, while also developing a slate of actionable arms control proposals to have at hand when circumstances again favor progress.

First, New START must be extended in 2021. The arguments against extension are weak. These include Trump's generalized accusation that it is a "bad deal" that favors Russia, that it does not address Russia's lead in tactical nuclear weapons, that it does not address hypersonics or underwater nuclear drones or other new technologies, and that it does not include rising nuclear power China.⁵⁸ In reality, the benefits of arms control plainly accrue to the treaty. New START balances U.S. and Russian forces and discourages arms racing at the strategic level.

57. For a thoughtful reflection, see JOHN LEWIS GADDIS, *THE UNITED STATES AND THE END OF THE COLD WAR* 127-30 (1992).

58. See, e.g., Steve Holland, *Trump Says He, Putin Discussed New Nuclear Pact Possibly Including China*, REUTERS (May 3, 2019, 12:03 PM), <https://perma.cc/YA3V-SJCF>.

The treaty's on-site inspections are an intelligence collection method of enormous value, allowing U.S. weapons experts to view Russian forces and warheads in the field, and also to verify dismantlement of nuclear hardware once pointed at the United States. Dating to the Cold War, issues in the Washington-Moscow relationship have often been separated into separate tracks to facilitate progress. There is no compelling reason that must change now, and that all nuclear issues must be resolved in one comprehensive agreement. Nor is it clear that replacement of current warheads on strategic forces with maneuverable hypersonics now threaten the strategic balance. Russia in 2019 began limited deployment of a hypersonic glide vehicle on the SS-19 missile, those warheads and their missiles count against the New START limits, and there are no indications that strategic stability is in appreciable peril.⁵⁹ The offensive forces of major nuclear powers so vastly outnumber and so easily overwhelm missile defenses that neither side will in the foreseeable future (and may well never) have missile defenses reliably capable even of intercepting enough of the other side's *slower, non-maneuverable* warheads to disrupt deterrence of a strategic nuclear attack. It is, therefore, hard to imagine a nuclear exchange becoming more or less likely because of hypersonics, and virtually impossible to see a solid hypersonics-based case against extending New START.⁶⁰ Finally, much of the new hardware on the drawing board touted by President Putin is still in development, and not expected to be fielded until *after* an extended New START would expire in 2026.⁶¹ In short, there is no compelling reason to make a hypothetical and unlikely comprehensive new treaty the imperative alternative to New START extension.

Once the benefits of New START are captured and extended for an additional five years, it is worthwhile to try to update the arms control regime. Forces and parties left out of New START are legitimate – indeed, long-overdue – subjects for new talks. Of course, it is challenging to understand how China could be integrated into a strategic forces-only treaty in a way that seems fair and workable. Blessing multiplication of the Chinese arsenal (to come up to the level of Russia and the United States) or requiring deep cuts to the strategic forces of the two nuclear peers (to drop to China's level) would be assailed from different quarters as problematic. Meanwhile, Secretary of State Mike Pompeo's suggestion that

59. See WOLF, *supra* note 30, at 14, 20-22 (“Avangard does not change the existing balance”).

60. It is in theory conceivable that Russia could select a hypersonic maneuverable warhead (probably using a tactical or theater-range missile or other delivery vehicle) for employment in an “escalate to de-escalate” limited strike in-theater, in order to frustrate U.S. or NATO missile defenses. But the utility of employing one or a small handful of warheads in the context of a conventional conflict that is not going the Kremlin's way is distinct from the focus of New START, which is facilitation of deterrence at the level of strategic (long-range) nuclear forces. A second scenario in which the capabilities of hypersonic maneuverable warheads might be meaningful is an accidental or unauthorized launch in which a small volley of warheads that would in theory otherwise be limited enough to be countered by missile defenses instead penetrates those defenses. Of course, making a catastrophic failure of nuclear command and control more deadly is no rationale for buying weapons.

61. See Hans M. Kristensen & Matt Korda, *The New START Treaty Keeps Nuclear Arsenals in Check and President Trump Must Act to Preserve It*, FORBES (Dec. 10, 2019, 11:18 AM), <https://perma.cc/6K8F-J5ML>.

China – and potentially the British and French, too – could be included in an agreement that promotes “a set of conditions” favorable to “global strategic stability” without all states coming under a flat cap (“any particular level”) is potentially encouraging, but gauzy.⁶² A more concrete approach would be an American-Chinese-Russian agreement limited geographically to INF-range and shorter-range missiles in Asia. Another is a geographically unrestrained three-party agreement that considers all missiles of all parties, including China’s large conventional missile inventory. Other ideas for which I have argued in recent years include the United States and NATO accepting Russian possession of some manageable number of intermediate-range nuclear-capable missiles (INFs) (and one at this point could add a U.S. commitment not to field a new nuclear sea-launched cruise missile (SLCM)), in exchange for Russian agreement to limits on tactical nuclear weapons or on Russia’s multiple-warhead (MIRVed) land-based ICBMs.⁶³

If keeping New START for just five more years is looking uncertain, anything like the grand bargains just mentioned may be non-starters without a major shock to the system, one that prompts a concerted multi-party drive to reduce nuclear dangers. In the meantime, smaller proposals may have better prospects. The nuclear powers could craft a code of conduct for nuclear forces. The parties could agree, for example, to keep nuclear-capable aircraft and submarines well away from one another’s airspace and waters. They could agree to regular data exchanges about their total warhead stockpiles, or about their intermediate-range and tactical nuclear weapons. Russia and the United States could also agree to extend the New START inspection regime indefinitely. At the very least, the two nuclear superpowers would then continue to have transparency about their long-range forces even if the treaty’s limits expire. That could provide a foundation and point of departure for re-starting arms control down the road.

CONCLUSION

In the early 1980s it was easy to think that the worst was yet to come. Able Archer 83, television depictions of nuclear holocaust, and a full-tilt arms race gave little reason for optimism. And yet quite suddenly the world changed. The chill that followed Détente’s demise was followed in turn by revolutionary change in attitudes and leadership. Tensions were eased, and new legal instruments were forged that were unprecedented in their force reductions and intrusive verification regimes. If it happened then, it can happen again. When the opportunity for progress returns, policymakers and thinkers will be in a stronger position if they have wisely used these discouraging days after the INF Treaty’s demise to develop a new agenda and promising ideas.

62. See Sec’y of State Michael R. Pompeo & Foreign Minister Sergey Lavrov, Remarks at a Press Availability (Dec. 10, 2019), <https://perma.cc/QU4R-Z9XF> (remarks at joint press conference in Washington, D.C.).

63. See Rudesill, *MIRVs Matter*, *supra* note 27; Rudesill, *Regulating Tactical Nuclear Weapons*, *supra* note 24.