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# The “Action-Reaction” Arms Race Narrative vs. Historical Realities

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# Introduction

*"The threat is clear: a new arms race has begun"*[1]

In recent years, the return of great power competition, increasingly explicit Russian nuclear threats to the United States and allies, renewed attention and debate on the planned modernization of U.S. strategic nuclear forces, the perceived erosion of arms control constraints, mounting international instability, and a general deterioration in the global strategic environment have all given rise to concerns that a new arms race is in the offing, initiated, propelled and accelerated by the United States. This study addresses the issue in its historical and analytical context.

An enduring theme in the critique of U.S. strategic acquisition programs is that U.S. programs instigate an action-reaction arms race dynamic. For decades, the argument against U.S. nuclear modernization and missile defense programs that has followed from this theme is that if the United States would exercise restraint in its modernization programs, so too would other nuclear powers. The contention here, of course, is that U.S. nuclear weapons and missile defense activities instigate others to pursue or expand their own nuclear programs. Thus, if the United States refrains from modernizing its nuclear forces and building or expanding its missile defense capabilities, others will do likewise—thereby bringing an arms race to an end or stopping it before it begins.

Critics of U.S. strategic offensive and defensive programs have leveled this charge against U.S. modernization efforts and offered this prescription for ending an arms race since the early 1960s. Opponents of the current U.S. strategic modernization program continue to emphasize this action-reaction narrative. This narrative is relatively uncontested because, with few exceptions, there remains little understanding of the history of U.S.-Soviet Cold War interaction in this regard and little attention has been paid to pertinent post-Cold War dynamics.

For nearly three decades, there has been a steady decline in U.S. expertise in the analysis of strategic deterrence and nuclear forces issues.[2] This decline corresponds to the general U.S. post-Cold War perception of relatively benign relations with both Russia and China, and the related dwindling concern over nuclear policy and failure to appreciate the enduring relevance of nuclear forces. However, with the renewed emphasis on great power competition and current U.S. plans to modernize all elements of its strategic nuclear deterrent, the notion that U.S. actions will initiate another spiral in a nuclear arms race has again become a common refrain among those who lack an understanding of or choose to ignore the historical and contemporary linkages

[1] Joseph Cirincione, "Restoring Nuclear Diplomacy: Urgent action is needed to put the lid on a new and costly global arms race," *The Foreign Service Journal*, May 2020, available at http://www.afsa.org/restoring-nuclear-diplomacy.

[2] "…the lack of interest in and attention to the nuclear mission and nuclear deterrence…have been widespread throughout DoD and contributed to the decline of attention in the Air Force." See, Department of Defense, *Report of the Secretary of Defense on DoD Nuclear Weapons Management, Phase II: Review of the DoD Nuclear Mission*, December 2008, p. iii, available at https://archive.defense.gov/pubs/pdfs/PhaseIIReportFinal.pdf.

between adversary actions and U.S. responses. Consequently, setting the record straight is of critical importance.

In the absence of an accurate understanding of the relationship between adversary developments and the evolution of U.S. nuclear and missile defense policy and strategy, a dominant notion remains widespread that the Cold War was a period of "mindless" arms racing—driven by a U.S.-led action-reaction cycle.[3] This characterization of U.S. policy and behavior endures despite empirical data to the contrary. The belief that U.S. actions are the primary instigators of arms races is again evident in the expressed opposition to the contemporary U.S. nuclear modernization program initiated by the Obama Administration and sustained by the Trump Administration. As some critics have asserted, "The parties are caught up in an action-reaction cycle that significantly increases the risks of escalation…. [U.S.] surplus forces… provide incentives and possible justification for potential U.S. adversaries to maintain unnecessarily large nuclear forces of their own, a self-perpetuating dynamic that fuels nuclear arms competition."[4] This critique of U.S. nuclear posture is now also applied to U.S. relations with North Korea.[5]

This study addresses the lack of understanding of strategic deterrence and nuclear force issues that has led to a resurgent belief in a contemporary action-reaction arms race dynamic. The study identifies and analyzes the evolution of, and changes to, U.S. nuclear policy and strategy and the variety of factors that led to those changes—from the late 1960's to the present. By identifying the major inflection points in U.S. policy and strategy and the reasons behind them, it empirically challenges the critique of a U.S.-led action-reaction arms race and helps to fill the knowledge gap that often leads to such mischaracterizations. The study helps today's interested public and policymakers understand the many factors actually driving U.S. policy and programs. A cogent, well-researched testing of the "mindless arms race" critique is critical to an understanding of the long-term implications of the nuclear modernization programs supported by the Obama and Trump Administrations.

Importantly, this study is not advancing the hypothesis that there was no arms interaction between the United States and the Soviet Union, nor that there is no U.S.-Russian interaction today. After all, it is not unreasonable to assume that a rational U.S. adversary will consider U.S. military capabilities in any relative assessment of comparative strength, whether it be for deterrence or warfighting purposes. Similarly, the United States would be foolish not to consider an adversary's military programs in its own defense planning. The focus of this study pertains to the types of interaction that have taken place and the way that interaction has been described in the public debate at the time when significant nuclear and missile defense programs were discussed. The contention here is that the description of this interaction as a *U.S.-led* action-reaction arms race

[3] This characterization of U.S. behavior began relatively early in the Cold War. See for example, Jeremy Stone, *Containing the Arms Race: Some Specific Proposals* (Cambridge, MA: MIT Press, 1966), pp. 16-17, 22-23; George Rathjens, "The Dynamics of the Arms Race," in *Arms Control: Readings From Scientific American* (San Francisco: W.H. Freeman and Co., 1973), pp. 177-187; Herbert York, *Race to Oblivion* (New York: Simon and Schuster, 1970), p. 234; and, Robert McNamara, *The Essence of Security: Reflections in Office* (New York: Harper and Row, 1968), pp. 58-67.

[4] See for example, Bruce G. Blair, Jessica Sleight and Emma Claire Foley, *The End of Nuclear Warfighting: Moving to a Deterrence-Only Posture* (Washington, D.C.: September 2018), pp. 9, 33.

[5] Ankit Panda, "New U.S. Missiles in Asia Could Increase the North Korean Nuclear Threat," November 14, 2019, available at https://foreignpolicy.com/2019/11/14/us-missiles-asia-inf-north-korea-nuclear-threat-grow/.

is a significant mischaracterization of the actual interaction that has taken place over decades. In fact, the study empirically demonstrates that in many cases, U.S. *inaction* prompted adversary actions in response.

In general, the action-reaction arms race thesis suggests that the actions taken by the United States in the area of nuclear and missile defense policy and programs were the primary motivator for reactions on the part of the Soviet Union/Russia that proved dangerous and destabilizing—to which the United States then had to respond in its own dangerous and destabilizing ways, leading to a decrease in the security of each and to a significant waste of resources. The corollary to this thinking, as expressed in the public debate, is that if only the United States had refrained from taking actions in the nuclear and missile defense spheres its restraint would have been reciprocated by others. The study uncovered no empirical evidence to suggest that this "inaction-inaction" corollary to the action-reaction thesis is valid. Former senior Defense Department and White House official Franklin Miller stated that "this whole notion that if only we exercise restraint, so too will the Russians, is built on a completely false premise that the Russians react to us." He called this notion "absurd," noting, for example, that the U.S. move to de-MIRV its ICBM force did not lead the Soviets to do the same.[6] In fact, many of the participants who agreed to be interviewed as part of the study's "oral history" component cited the statement of former Secretary of Defense Harold Brown to argue that Soviet developments were not merely a reaction to U.S. actions: "Soviet spending has shown no response to U.S. restraint—when we build, they build; when we cut, they build."[7]

Other official and unofficial studies and reports have analyzed the action-reaction metaphor and found it to be incomplete or inaccurate in describing the historical strategic relationship between the United States and the Soviet Union. For example, as Richard B. Foster of the Stanford Research Institute noted:

> There has, in the past, been only a vaguely discernible correlation between changes in U.S. and Soviet defense expenditures and allocations within the annual military budgets. This has been especially true for supposed changes in corresponding parts of the United States budget. Some new defense expenditures on specific items by one power have provoked no reaction at all from the other. Others have provoked a quite irrelevant reaction—not a direct counter to the adversary's reaction but an imitation of it.[8]

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[6] Telephone interview conducted on May 15, 2020.

[7] Testimony of Secretary of Defense Harold Brown before the U.S. Congress, House of Representatives, Committee on the Budget, *Outlook and Budget Levels for Fiscal Years 1979 and 1980: Hearings Before the United States House of Representatives Committee on the Budget*, 96th Congress, 1st Session, Part 1 (Washington, DC: U.S. Government Printing Office, 1979), p. 500, available at https://books.google.com/books?id=8N9FAQAAMAAJ&pg=PA500&lpg=PA500&dq=%22Soviet+spending+has+shown+no+response+to+U.S.+restraint%E2%80%94when+we+build,+they+build;+when+we+cut,+they+build%22&source=bl&ots=b3gm6YekKu&sig=ACfU3U3Kl3rVtkNM9V8UzwNYhDj3Fk4e4g&hl=en&sa=X&ved=2ahUKEwiOscDnzfHvAhVjD1kFHcssBn0Q6AEwAXoECAIQAw#v=onepage&q=%22Soviet%20spending%20has%20shown%20no%20response%20to%20U.S.%20restraint%E2%80%94when%20we%20build%2C%20they%20build%3B%20when%20we%20cut%2C%20they%20build%22&f=false.

[8] Richard B. Foster, *The Impact of Ballistic Missile Defense on Arms Race Prospects*, SSC-RM-ISR-1 (Menlo Park, CA: Stanford Research Institute, 1965), p. 2.

> Soviet expenditures cannot be related to a reaction to U.S. outlays, except for the possibility that the sharply *increasing* Soviet expenditures for strategic forces (now $16-18 billion per year) are a reaction to *decreasing* U.S. expenditures for the same programs (now $8-9 billion per year).[9] (emphasis in original)

Moreover, a 1995 study conducted for the Department of Defense's Office of Net Assessment concluded that while the Soviets responded to "qualitative technological advances" on the U.S. side, their "quantitative arms buildup was driven primarily by the internal dynamic and needs of the vast civilian-dominated defense-industrial establishment, where stability and continuity of production were imperative."[10] A more recent study concluded, "The 'action-reaction' model of the arms competition failed to account for Soviet behavior because it disregarded the autonomy of Soviet decision-making."[11] And a comprehensive analysis of the U.S.-Soviet strategic competition concluded:

> The facts will not support the proposition that either the Soviet Union or the United States developed strategic forces only in direct immediate reaction to each other…. The facts and the historical circumstances in which they occurred testify to complex patterns of mutual influence…. No sweeping generalizations about action-reaction cycles or inexorable Soviet designs or the momentum of science and technology can survive detailed examination of the sequence of events.[12]

Numerous former U.S. government officials interviewed as part of this study also challenged the action-reaction arms race metaphor, with some referring to it as "deeply flawed" and "foolish." Amb. Ronald Lehman, former Director of the U.S. Arms Control and Disarmament Agency, called it "hyper-simplistic."[13] Several who served in both Republican and Democratic administrations argued that the narrative "doesn't hold water" historically and "doesn't stand up to the facts." Amb. Robert Joseph, Under Secretary of State for Arms Control and International Security in the George W. Bush Administration, referred to it as "an article of faith" within the arms control community that is both "faulty" and "inimical to U.S. security."[14] Dr. John Harvey, Principal Deputy to the Assistant Secretary of Defense for Nuclear and Chemical and Biological Defense Programs in the Obama Administration, stated the United States "is not a stimulator of the arms race" and called assertions to the contrary "blatant fabrications." He noted that the U.S.-led action-reaction narrative is a "mantra" for the anti-nuclear community that has "not one ounce of credibility" and that there is "not one piece of evidence" to support it.[15] He also characterized as erroneous the

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[9] Richard B. Foster, "The Safeguard BMD and Arms Control Prospects for the 1970s," in William R. Kintner, ed., *Safeguard: Why the ABM Makes Sense* (New York: Hawthorn Books, 1969), p. 248.

[10] John G. Hines, Ellis M. Mishulovich, and John F, Shull, *Soviet Intentions 1965-1985*, Vol. 1, September 22, 1995, p. 7, available at http://russianforces.org/files/Soviet%20Intentions%201965-1985%20Vol.%201.pdf.

[11] David S. Yost, "Strategic Stability in the Cold War: Lessons for Continuing Challenges," *Proliferation Papers*, No. 36, Winter 2011, p. 24, available at https://www.ifri.org/sites/default/files/atoms/files/pp36yost.pdf.

[12] Ernest R. May, John D. Steinbruner, Thomas W. Wolfe, and Alfred Goldberg, *History of the Strategic Arms Competition 1945-1972, Part II*, Office of the Secretary of Defense, Historical Office, March 1981, pp. 810-811, available at http://documents.theblackvault.com/documents/dod/readingroom/10/227.pdf.

[13] Telephone interview conducted on April 29, 2020.

[14] Telephone interview conducted on May 7, 2020.

[15] Telephone interview conducted on May 27, 2020.

action-reaction argument that India's decision not to adopt a "no first use" policy regarding nuclear weapons was driven by the U.S. decision not to do so.[16]

Other oral history interviewees likewise criticized the action-reaction narrative as historically inaccurate. The notion that both sides were engaged in a "mindless, spiraling, action-reaction arms race" arms race was criticized by Richard Perle, Assistant Secretary of Defense for International Security Policy in the Reagan Administration, as "equally wrong and pernicious."[17]

There was, however, general agreement that arms interaction between the United States and the Soviet Union took place, but not in a way that the action-reaction metaphor used to argue against U.S. strategic programs postulates. Instead, the type of interactions that were particularly apparent were U.S. efforts to preserve its deterrent capacity in the face of a long-term, massive Soviet military buildup and an increasingly aggressive and hostile Soviet foreign policy supported by that buildup. In fact, Soviet leaders emphasized the nexus between the Soviet strategic nuclear buildup and increasingly aggressive Soviet geopolitical actions in the 1970s.[18]

There are several other corollaries to the action-reaction thesis. For example, it is possible that U.S. actions forestalled, or precluded actions taken by others. This "action-inaction" dynamic appears to have operated in several cases during the time period covered by this study. For example, by responding to the Soviet deployment of SS-20 ballistic missiles targeted against Europe with deployment of ground-based Pershing II ballistic missiles and cruise missiles, the United States was able not only to halt the buildup of Soviet intermediate-range nuclear forces but to enable the complete elimination of these systems through negotiation of the Intermediate-range Nuclear Forces (INF) Treaty. In addition, the study finds evidence of an "inaction-action" dynamic, whereby U.S. nuclear restraint actually *encouraged* others to take actions considered dangerous and destabilizing, such as when the United States limited its ICBM deployments, creating an incentive for the Soviet Union to expand its own capability to place U.S. ICBMs at risk. As Richard Perle noted, Secretary of Defense Robert McNamara's decision to freeze the number of U.S. Minuteman ICBM silos at 1,000 "presented the Soviets with an opportunity to design their force to contend with a limited number" of U.S. ICBMs and "helped to fuel the Soviet buildup."[19] Other examples, cogently articulated by Albert Wohlstetter in his seminal 1974 article, "Is There A Strategic Arms Race?,"[20] famously demonstrated the inapplicability of the simplistic action-reaction arms race narrative, as it has been used in the public debate, to strategic developments on both sides.

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[16] For example, Scott Sagan has written that the U.S. unwillingness to foreswear the use of nuclear weapons first "has influenced other states, such as India, to adopt a similar nuclear doctrine." Scott D. Sagan, "The Case for No First Use," *Survival*, Vol. 51, No. 3, June-July 2009, p. 170, available at https://www.almendron.com/tribuna/wp-content/uploads/2015/04/the-case-for-no-first-use-sagan.pdf.

[17] Telephone interview conducted on May 14, 2020.

[18] Keith B. Payne, *Nuclear Deterrence in US-Soviet Relations* (Boulder, CO: Westview Press, 1982), pp. 79-122.

[19] Telephone interview conducted on May 14, 2020.

[20] Albert Wohlstetter, "Is There a Strategic Arms Race?," *Foreign Policy*, No. 15, Summer 1974, pp. 3–20, available at https://doi.org/10.2307/1147927.

## The Role of Arms Control

Another factor in assessing the veracity of the action-reaction paradigm revolves around the U.S. experience with arms control. The United States, and the West in general, has traditionally looked to arms control agreements as a way of managing strategic competition and preventing or forestalling an arms race. Arms control was considered not only an effective way to bound the quantitative growth of adversary capabilities, but also to provide transparency and predictability into the strategic relationship between the United States and Soviet Union/Russia. As one former nuclear arms control negotiator has stated, "Nuclear arms control is the only way that we can attain stable and predictable deployments of these most fearsome weapons, and it is the only way that we can assure that we won't be bankrupted by nuclear arms racing."[21]

Despite this general belief in the efficacy of nuclear arms control as a means of ensuring stability, transparency, and predictability in the strategic relationship, most of the former senior U.S. government officials interviewed for this study challenged this view. Only a handful of arms control agreements were cited as positive and useful, including the Nuclear Non-Proliferation Treaty (NPT), the INF Treaty, and the START I agreement. Amb. Robert Joseph, Amb. Ronald Lehman, and Franklin Miller, who served in multiple Republican and Democrat administrations, expressed the view that the START II Treaty could have been beneficial for U.S. security had it entered into force because it would have eliminated Russia's MIRVed ICBM force.[22]

Though some participants expressed support for arms control as a means of communication to reduce misperceptions and the risk of conflict, others saw arms control as a tactic used by the Soviet Union and now Russia to constrain U.S. nuclear forces and capabilities unilaterally while leaving Soviet/Russian nuclear forces relatively unconstrained. Moreover, there was a general sense that the Soviets and Russians violated those agreements that they did not believe served their interests, and that repeated U.S. failure to respond to those violations—by both Republican and Democrat administrations—encouraged additional cheating. John Harvey argued that arms control can help "assure" allies, maintain domestic political support for necessary modernization programs (a point also raised by Obama Administration arms control official Frank Rose), and make a "modest contribution" to U.S. security "if the agreement is being complied with." He stated that "arms control has always been the thing you can discuss with the Russians when you can't discuss anything else."[23] Richard Perle commented that arms control actually helped contribute to a destabilizing Soviet arms *buildup* by encouraging the Soviet Union to channel resources into the types of strategic offensive systems that were not accounted for or limited by treaty.[24] Similarly, Amb. Ronald Lehman noted that the Soviet deployment of SS-20 intermediate-range ballistic missiles in the European theater was "an easy way to modify an ICBM and have something that was a grey area system that would escape coverage. So, here's a case where arms control had at least some role in encouraging a grey area development."[25]

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[21] Rose Gottemoeller, "U.S.-Russian Nuclear Arms Control Negotiations—A Short History," *The Foreign Service Journal*, May 2020, p. 26, available at http://www.afsa.org/sites/default/files/may2020fsj.pdf.

[22] Telephone interviews conducted on April 29, May 7, and May 15, 2020.

[23] Telephone interview conducted on May 27, 2020.

[24] Telephone interview conducted on May 14, 2020.

[25] Telephone interview conducted on April 29, 2020.

Today, there are familiar action-reaction derived arguments expressed by critics of the Obama and Trump Administrations' nuclear modernization programs—that they will start yet another spiral in the arms race. For example, one critic noted, "The United States claims that its programs are a response to nuclear developments in Russia, but our actions motivate further weapons building on their side, as the action-reaction cycle of nuclear arming spins onward in a replay of the Cold War."[26] Another critic stated that Russia and China will "fear" U.S. plans "and so feel pressured to spend massive amounts on new or upgraded nuclear and non-nuclear weapons of their own." U.S. moves to develop more exotic weaponry, he noted, "will no doubt hasten similar moves by Moscow and Beijing…"[27]

French President Emmanuel Macron has warned that the impending expiration of the 2010 New START Treaty in February of 2021 could result in "the possibility of a pure and unrestrained military and nuclear competition, the likes of which we haven't seen since the end of the 1960s."[28] Domestic U.S. critics of current policy also assert a contemporary version of the inaction-inaction argument—if the United States sustains the existing strategic arms control regime and process, there will be no arms race, i.e., if the United States commits to restraint via arms control (including extending New START), an arms race will be avoided. However, if the United States does not preserve existing arms control agreements, "the door to an ever-more dangerous and costly global nuclear arms race will swing wide open."[29] In each case, the action-reaction charge and its corollary inaction-inaction argument, the presumption is that the United States takes the lead and that it is U.S. behavior that determines the behavior of others for good or ill. This presumption essentially ignores the possibility that opponent behavior is shaped by internal goals independent of and contrary to U.S. actions, and that those goals may be incompatible with U.S. national security interests and objectives.

Despite these expressed concerns, this study demonstrates that, with limited exceptions, the historical record does not support the U.S.-led action-reaction metaphor as used to argue against U.S. strategic programs or its corollary inaction-inaction assertion. Indeed, it appears that arms control agreements have actually contributed to a channeling of adversary investments into nuclear capabilities that left the United States more vulnerable and less secure than was hoped. For example, arms control limitations on launchers, rather than warheads, encouraged the Soviet Union to deploy heavily MIRVed ICBMs, such as the SS-18, with significant counterforce potential.

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[26] David Cortright, "Pope Francis and the U.S. bishops are correct: We cannot engage in a new nuclear arms race," *America: The Jesuit Review*, April 16, 2020, available at https://www.americamagazine.org/politics-society/2020/04/16/pope-francis-and-us-bishops-are-correct-we-cannot-engage-new-nuclear.

[27] Michael T. Klare, "Now Is Not the Time to Start an Arms Race," March 31, 2020, available at https://www.thenation.com/article/world/coronavirus-cold-war-race/.

[28] Speech by French President Emmanuel Macron, "Macron says 'Europeans cannot remain spectators' in new arms race," *Agence-France Presse*, February 7, 2020, available at https://www.france24.com/en/20200207-macron-says-europeans-cannot-remain-spectators-in-new-arms-race.

[29] Daryl G. Kimball, "Nuclear Arms Control, or a New Arms Race? Trump Seems Bent on the Latter," *Just Security*, May 27, 2020, available at https://www.justsecurity.org/70407/nuclear-arms-control-or-a-new-arms-race-trump-seems-bent-on-the-latter/.

## Study Methodology

The study examines numerous primary, open source documents regarding the development of U.S. strategic policy. These include now-declassified governmental and unclassified non-governmental documents and books that have closely examined specific periods within this time span. In addition, the study moves beyond reliance on existing open source and declassified documents and draws on interviews with key former officials and knowledgeable academics, including more than a dozen former senior-level officials from both Democratic and Republican administrations.[30] This unique body of "oral history" significantly contributes to an understanding of these critical issues as they unfolded over time.

Despite its historical focus, the study is relevant to the contemporary debate on U.S. nuclear weapons modernization. The familiar Cold War action-reaction arms race critique of U.S. policy and programs is now proffered frequently without apparent recognition of the actual dynamics behind past U.S. behavior. Missing is an understanding of the historical trends and drivers that shaped past U.S. decisions and actions and appear to be doing so again today.

Critics of the current U.S. modernization program often assert that by pursuing some modernized capabilities, the United States is threatening to lead yet another action-reaction cycle of the arms race. The aforementioned comment that, "The United States claims that its programs are a response to nuclear developments in Russia, but our actions motivate further weapons building on their side, as the action-reaction cycle of nuclear arming spins onward in a replay of the Cold War"[31] was criticized as historically inaccurate and overly simplistic by multiple oral history interviewees. For example, John Rood, Under Secretary of Defense for Policy in the Trump Administration, noted the "hollowness" of this argument, suggesting that those who propagate it are "impervious to data."[32]

The political, yet implicit implication of this argument is that if the United States steps back from its modernization program, others, including Russia and China will do likewise. This study tested this critique against more recent history and suggests otherwise. Understanding the factors that shaped past U.S. nuclear force and missile defense decisions is now critical to an understanding and appreciation of the rationale behind contemporary U.S. strategic offensive and defensive modernization programs that support U.S. deterrence objectives.

This study builds upon the ground-breaking work of Colin Gray, Albert Wohlstetter, and others who analyzed the action-reaction dynamic decades ago. The study analyzes key "inflection points" representing major changes in the U.S. approach to nuclear policy, strategy, and programs from the Johnson Administration to the present day. It documents the evolution of the action-reaction arms race narrative and how it was employed during major inflection points both during and following the Cold War. It first theoretically introduces the concept and defines it for the purposes of the study. It highlights different possible understandings of the concept and its historical usage, discusses the way the action-reaction metaphor is employed in the public

[30] The list of oral history interviewees is available in the Appendix.

[31] Cortright, op. cit.

[32] Telephone interview conducted on April 23, 2020.

debate, and theoretically grounds the remainder of the study. Then the study examines the following major inflection points:

- The U.S. decision to forego strategic missile defense in the late 1960s and early 1970s;
- The issuance of the 1974 National Security Decision Memorandum-242 (NSDM-242) and the U.S. movement to develop "Limited Nuclear Options";
- The issuance of the 1980 Presidential Directive-59 (PD-59) and U.S. movement toward the "Countervailing Strategy" that called for a reinvigoration of U.S. nuclear weapons modernization efforts;
- The 1980's nuclear buildup;
- The Strategic Defense Initiative (SDI) program;
- The decision to withdraw from the 1972 Anti-Ballistic Missile (ABM) Treaty and deploy a limited national missile defense system in the early 2000s;
- The post-Cold War U.S. goal of reducing U.S. reliance on nuclear weapons (with an increased focus on nuclear terrorism and nonproliferation); and
- Moving toward nuclear modernization in the wake of a return to great power competition over the last several years.

The study's conclusions address the policy implications of significantly diminished U.S. overall attention to nuclear weapons issues, which has been a bipartisan hallmark of the post-Cold War environment and which has contributed to a less than robust general understanding of the interaction between adversary actions and U.S. responses.

# Chapter II
# Conceptualizing the Term "Arms Race"

*"Our officials sometimes overestimate, and sometimes underestimate, and sometimes even get it right: in any case neither misestimate entails expanding budgets or military adventurism."*[33]

This chapter presents as the basis for this study the general idea of an action-reaction "arms race," introduces it in its historical context, and discusses the way the term has been used in the public debate. This step is warranted because the term "arms race" has taken on many meanings, including pejorative ones, in different contexts since entering the national security lexicon decades ago. The term is also often used without being defined altogether.[34] Occasionally the term is used to suggest that spending on nuclear weapons systems modernization is a waste of resources that could be devoted to other more "worthy" causes or higher priority needs.[35] At other times, the term is used to suggest an increased likelihood of war.[36] A lack of conceptual clarity is convenient because it allows the term to be used as a form of shorthand for arguing against U.S. policies or actions in general that are intended to improve U.S. nuclear and missile defense capabilities. By doing so, it ignores the need to clarify causal mechanisms through which arms races operate and avoids the necessity of weighing various factors that more accurately reflect the interactions between adversaries.

A number of contemporary writers and analysts have argued that any qualitative or quantitative improvements to U.S. nuclear forces are likely to spark an arms race.[37] Implicit in these arguments is the assumption that if the United States does not modernize its nuclear forces, there will be no arms race, i.e., inaction-inaction. This corollary of the action-reaction metaphor also presumes that the behavior of others in this area is governed by prior U.S. behavior. For example, as noted earlier, one critic of U.S. nuclear modernization plans has argued that U.S. investment in nuclear and advanced conventional capabilities will cause Russia and China to "fear U.S. plans for offensive attacks on their homelands," causing them to "feel pressured to spend massive amounts on new or upgraded nuclear and non-nuclear weapons of their own." The U.S. strategy of focusing on the re-emergence of great power competition "will also force the Russians and Chinese to revise their own defense policies," according to this critic, who concludes that the "inevitable result" will be "a costly arms race between the United States and both Russia and

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[33] Wohlstetter, op. cit.

[34] Adam Mount, *The Case Against New Nuclear Weapons* (Washington, D.C.: Center for American Progress, May 4, 2017), available at https://www.americanprogress.org/issues/security/reports/2017/05/04/431833/case-new-nuclear-weapons/.

[35] George W. Rathjens, "The Dynamics of the Arms Race," *Scientific American*, Vol. 220, No. 4 (April 1969), pp. 15-25.

[36] For a rebuttal of this argument see for example, Bernard Brodie, "On the Objectives of Arms Control," *International Security*, Vol. 1, No. 1 (Summer 1976), pp. 17-36, available at https://doi.org/10.2307/2538574.

[37] See for example, Bruce Blair, Jessica Sleight, and Emma Claire Foley, *The End of Nuclear Warfighting: Moving to a Deterrence-Only Posture* (Global Zero, September 2018), available at https://www.globalzero.org/wp-content/uploads/2019/02/ANPR-Final.pdf.; or, Eric Schlosser, "The Growing Dangers of the New Nuclear-Arms Race," *The New Yorker*, May 24, 2018, available at https://www.newyorker.com/news/news-desk/the-growing-dangers-of-the-new-nuclear-arms-race.

China, consuming mammoth sums at a time of widespread economic hardship, while vastly increasing the risk of accidental or inadvertent nuclear war."[38]

Yet history demonstrates that others act or react on the basis of their own leadership motivations and national security considerations, which are unique to every actor (Colin Gray referred to this as a leadership's unique "strategic culture"). Indeed, this point was emphasized by multiple oral history interviewees, who noted that it is overly simplistic and erroneous to postulate that adversary behavior with respect to nuclear weapons issues is simply a reaction to U.S. developments. The presumption that U.S. action or inaction will be the primary reason for others' behavior ignores the unique historical, cultural, leadership goals, and security concerns that factor into another country's decision-making calculus. Indeed, this study does not find support for the notion that U.S. nuclear weapons modernization actions are solely, or even primarily, responsible for the actions taken by other states or that U.S. inaction leads to others' inaction.

In addition, critics of U.S. policies often conflate necessary and desirable technological modernization with actions that will cause yet another "spiral" in the arms race, including when those technological improvements are intended to lower the risk of nuclear conflict and improve the safety and security of the weapons in the U.S. nuclear arsenal. For example, improved command and control systems can lower the chance that a nuclear war starts by accident and maximize decision-making time in a conflict.[39] Even at the peak of the Cold War, the United States and the Soviet Union had a shared interest in not starting a nuclear war by accident. Improved command and control systems are seen by some, however, as potentially destabilizing as they are linked tightly to and rely on early warning indicators and intelligence that may be erroneous. As one analyst noted:

> A threatening military action or alert is detected almost immediately by the other side's warning and intelligence systems and conveyed to force commanders. The detected action may not have a clear meaning, but because of its possible dire consequences, protective measures must be taken against it. The action-reaction process can spiral, extending from sea-based forces to air- and land-based forces.[40]

Technological advancements have been seen by some as the primary drivers of an arms race. For example, Herbert York, former Director of the Lawrence Radiation Laboratory and chief scientist at the Defense Advanced Research Projects Agency, argued that the arms race was driven by "a sort of technological exuberance that has overwhelmed the other factors that go into the making of overall national policy."[41] Others have contended that there "has been a certain tendency for technology to drive both strategy and doctrine."[42] As one analyst recently stated,

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[38] Klare, op. cit.

[39] Albert Wohlstetter, et al., "Is There a Strategic Arms Race? (II): Rivals but No 'Race,'" *Foreign Policy*, No. 16 (Autumn, 1974), pp. 48-92, available at https://doi.org/10.2307/1147844.

[40] Paul Bracken, "Instabilities in the Control of Nuclear Forces," adapted from Paul Bracken, *The Command and Control of Nuclear Forces* (New Haven, CT: Yale University, 1983), pp. 6-7, available at https://ee.stanford.edu/~hellman/Breakthrough/book/pdfs/bracken.pdf.

[41] Cited in Patrick W. Hamlett, "Technology and the Arms Race," *Science, Technology, & Human Values*, Vol. 15, No. 4 (Autumn 1990), p. 462.

[42] Col. Richard G. Head, cited in Ibid, p. 462.

"The United States and Russia are already engaged in a qualitative arms race."[43] Another commented that "The current arms race between the United States and Russia betrays the same assumptions as the last one: that new weapons will be better, and that technological innovations can overcome the nuclear threat. It's a familiar delusion."[44] Yet another has written that advances in technology, including the incorporation of artificial intelligence into weapons systems, will lead to more rapid and automated decision making as "competitive pressures in fast-paced environments threaten to push humans further and further out of the loop…. With this arms race in speed comes grave risks" and the possibility of "a war that spirals out of control in mere seconds."[45]

But such developments cannot be reasonably portrayed as harbingers of a new arms race. William R. Van Cleave, a strategic analyst and former member of the U.S. delegation to the Strategic Arms Limitation Talks (SALT), noted that with respect to the development of the U.S. strategic ballistic missile force, "technology did not lead automatically to decisions on strategic forces; rather, technology encountered much resistance…"[46] As another analyst has noted, "no other form of technological decision making undergoes more careful, in-depth and ongoing analyses than the creation of strategic weapons systems."[47] Nor can one assume that technological improvements to adversary systems are merely a response to U.S. technological developments as opposed to efforts to improve the safety and security or performance of their own weapons stockpiles. Industrial processes change, materials change, and technologies advance.

In other words, weapons systems may improve in a qualitive sense over time, often in ways that heighten overall safety and lessen the risks of accidental or unauthorized use, but such improvements reflect the broader realities of technological advances rather than the spark of an arms race. This fact is often ignored by proponents of the action-reaction charge against U.S. policies and programs. They rarely if ever even address the underlying safety and security rationale for nuclear force improvements achieved via better technological capabilities. Ignoring or downplaying the potentially beneficial aspects of technical improvements perpetuates the dubious view that any improved capability is inherently illegitimate and dangerous, regardless of the context in which such a capability is being developed. Moreover, such improved capabilities

[43] William Hartung, "How To Head Off the Next Nuclear Arms Race," *Forbes*, May 13, 2020, available at https://www.forbes.com/sites/williamhartung/2020/05/13/how-to-head-off-the-next-nuclear-arms-race/#e67de6b28e41.

[44] Eric Schlosser, "The Growing Dangers of the New Nuclear-Arms Race," *The New Yorker*, May 24, 2018, available at https://www.newyorker.com/news/news-desk/the-growing-dangers-of-the-new-nuclear-arms-race.

[45] Paul Scharre, *Army of None: Autonomous Weapons and the Future of War* (New York: W.W. Norton, 2018), p. 229, cited in, Michael T. Klare, "An 'Arms Race in Speed': Hypersonic Weapons and the Changing Calculus of Battle," *Arms Control Today*, June 2019, available at https://www.armscontrol.org/act/2019-06/features/arms-race-speed-hypersonic-weapons-changing-calculus-battle.

[46] William R. Van Cleave, "The US Strategic Triad," in Ray Bonds, ed., *The US War Machine* (New York: Crown Publishers, Inc., 1978), p. 60.

[47] Hamlett, op. cit., pp. 462-463.

are often considered, incorrectly as this study shows, to be responsible for steps that other states take as a reaction to developments in the United States.[48]

In one of the founding works advancing the action-reaction explanation of arms races, George Rathjens, a professor at MIT and former official at the Defense Department, State Department, and the White House, argued that, "The action-reaction phenomenon, with the reaction often premature and/or exaggerated, has clearly been a major stimulant of the strategic arms race."[49] However, arms races are not mechanistic and insulated from the overall context of international relations; they are about political hostilities and conflicts of interest, as strategist Colin Gray pointed out over four decades ago.[50] Gray wrote, "…the nuclear arms race—like all arms races—must be seen as an expression of political conflict."[51] The point here is that there often are interactions, but there can be no assumed action-reaction or inaction-inaction dynamic because arms decisions are shaped by the unique and varied perceptions, political goals and processes of the parties involved. These factors can move countries to noninteractive behaviors or to a variety of interactions other than action-reaction or inaction-inaction. As former Secretary of Defense Harold Brown observed, "…the political relationship drove the success or failure of arms control much more than the other way around."[52]

Multiple patterns of military/weapons interaction other than the action-reaction dynamic are possible. For example, a country might respond to a lack of action on the part of an adversary because the costs of doing so are acceptable relative to an adversary's inaction and the benefits of doing so outweigh the advantages of failing to act, as may have been the case with the United States and its decision to not deploy a comprehensive ballistic missile defense system in the early 1970s and the subsequent Soviet decision to pursue hard target kill capabilities.[53] Inaction might stimulate an adversary's action. The reverse might also be true: a country's action might stimulate an adversary's inaction; for example, the U.S. decision to improve its air defense systems in 1950s and early 1960s may have led to the Soviet Union placing less emphasis on its bomber force. In this case, a country might decide that an adversary's action makes a response too costly or risky and forego a response. In fact, history provides examples of both instances.

In addition to the factors noted above, domestic processes ranging from bureaucratic inertia to strategic doctrine to government structure can all impact the arms interaction between various actors.[54] Those who assert that the United States consistently is the initial cause of arms racing

[48] Richard Burt and John Wolfstahl, "America and Russia May Find Themselves in a Nuclear Arms Race Once Again," *The National Interest*, January 17, 2018, available at https://nationalinterest.org/feature/america-russia-may-find-themselves-nuclear-arms-race-once-24100.

[49] Rathjens, "The Dynamics of the Arms Race," op. cit., p. 19.

[50] Colin S. Gray, *The Soviet-American Arms Race* (Lexington, MA: Saxon House Studies, 1976).

[51] Colin S. Gray, "The Arms Race Is About Politics," *Foreign Policy*, No. 9 (Winter 1972-1973), pp. 117-29, available at https://doi.org/10.2307/1148088.

[52] See, *SALT II and the Growth of Mistrust*, Transcript of the Proceedings of the Musgrove Conference of the Carter-Brezhnev Project, Musgrove Plantation, St. Simon's Island, GA, May 7-9, 1994, p. 131, available at https://nsarchive2.gwu.edu/carterbrezhnev/C-B%20-%20SALT%20II%20-%20Musgrove%20master%20transcript.pdf.

[53] Wohlstetter, "Is There a Strategic Arms Race?," op. cit.

[54] Colin S. Gray, "The Arms Race Phenomenon," *World Politics*, Vol. 24, No. 1 (October 1971), pp. 39-79, available at https://doi.org/10.2307/2009706.

often assume the United States engages in worst-case scenario planning and overreactions to its own misconceptions, thus driving an upward spiral of armaments that forces an adversary to respond. However, such assertions are not supported by empirical evidence, which shows that the United States tended to underestimate the pace and robustness of Soviet nuclear force deployments.[55]

For the purposes of this study, an arms race is defined as a relationship between "two or more parties perceiving themselves to be in an adversary relationship, who are increasing or improving their armaments at a *rapid* [emphasis in the original] rate and structuring their respective military postures with a *general* [emphasis in the original] attention to the past, current, and anticipated military and political behavior of the other parties."[56] Therefore, this study encompasses time periods when the United States engaged in military competition with the Soviet Union that could be considered an arms race (e.g., during certain periods during the Cold War) and time periods when it could not (e.g., following the end of the Cold War when the perception of the Russian Federation as a threat to the United States subsided leading to changes in U.S. nuclear force posture). Russia's nuclear posture changed immediately after the end of the Cold War too, although in hindsight these changes appear more to be the result of limited resources based on a severe economic downturn rather than a result of a fundamental moderation in Russia's geopolitical aspirations.

As noted above, statements about what drives an arms race often ignore the critical political aspects of a relationship that are primarily responsible for the arms interactions that take place between parties. For example, President John F. Kennedy's Secretary of Defense Robert McNamara argued:

> Whatever be their intentions, whatever be our intentions, actions—or even realistically possible actions—on either side relating to the buildup of nuclear forces, be they either offensive or defensive forces, necessarily trigger reactions on the other side. It is precisely this action-reaction phenomenon that fuels the arms race.[57]

Yet political and ideological differences between the United States and the Soviet Union created the context for an adversarial relationship, not the mere existence of weapons programs. The military competition between these two powers was a reflection of the distrust that existed as a result of that adversarial relationship. As Albert Wohlstetter commented, "The arms decisions of the two superpowers cannot be taken simply as unfortunate cases of reciprocal failure by both superpowers to see that all their important interests are held in common. They are not."[58]

In fact, multiple oral history interviewees commented that Soviet and Russian strategic arms decisions have been motivated by a plethora of political, psychological, historical, cultural,

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[55] Wohlstetter, et al., "Is There a Strategic Arms Race? (II): Rivals but No 'Race,'" op. cit., pp. 48-92.

[56] Gray, "The Arms Race Phenomenon," op. cit., p. 40.

[57] *Remarks by Secretary of Defense Robert S. McNamara Before United Press International Editors and Publishers*, September 18, 1967, available at https://www.cia.gov/library/readingroom/docs/CIA-RDP70B00338R000300100105-8.pdf/.

[58] Wohlstetter, "Is There a Strategic Arms Race?," op. cit., p. 8.

economic, and other factors that are conveniently ignored or downplayed by those who assert that Soviet/Russian behavior can be explained as simply reacting to U.S. actions. Several interviewees took issue with a 1975 article by Paul Warnke, former Director of the U.S. Arms Control and Disarmament Agency, titled, "Apes on a Treadmill," in which he argues, "Both [the United States and Soviet Union] continue to amass nuclear weapons in quantities and varieties inexplicable on any military basis."[59]

Nevertheless, the near-canonical view of arms racing as a U.S.-driven action-reaction phenomenon gained traction in late 1960s and early 1970s. Given the timeframe, it is necessary to understand the term in the context of arms control negotiations of the late 1960s. The proponents of arms control were under pressure to show its utility to the United States. They needed to show the Soviet Union as an actor *worthy* of investment in arms control because arms control could potentially modify the Soviet Union's behavior. These negotiations would later result in the Strategic Arms Limitation Talks (SALT), culminating in the signing of the SALT I Interim Agreement in 1972. The following chapter will elaborate on this dynamic more closely.

Another conceptual issue is the lack of clarity and uniformity with regard to how one would measure an "arms race." One possible and frequently employed measure is that of defense expenditures.[60] Defense expenditures can be measured in several ways, for example as a percentage of Gross Domestic Product (GDP), as a share of a president's budget request, or as the authorized or appropriated amount by Congress. Using defense spending as a metric for judging whether an arms race exists is problematic because it does not necessarily reflect capabilities that a nation is procuring and because official figures may not accurately reflect the resources a nation actually spends on military capabilities. For example, much uncertainty surrounds the official military budget figures announced by China, much as the Soviet Union's publicly announced military budget grossly underestimated the actual burden on the overall Soviet economy. Even so, U.S. defense spending decreased in real terms by 38 percent between 1968 and 1978, during a period of time when the Soviet Union engaged in a massive expansion of its nuclear forces.[61]

In addition, military budget comparisons are inherently flawed for other reasons. A large portion of the U.S. defense budget today goes to pay for the personnel costs associated with an all-volunteer force, whereas the military personnel costs of other countries, like Russia and China,

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[59] Paul C. Warnke, "Apes on a Treadmill," *Foreign Policy*, No. 18, Spring 1975, p. 12. During congressional testimony in 1979, Senator Daniel Moynihan (D-NY) stated to Secretary of Defense Harold Brown, "I take it that there are not two apes on the treadmill, that this is not the relationship you are describing," to which Secretary Brown replied, "Certainly not in that simplistic form." See Harold Brown, Testimony before Senate Budget Committee, *First Concurrent Resolution on the Budget—Fiscal Year 1980*, Vol. II, April 18, 1979, p. 140, available at https://books.google.com/books?id=i0hLAQAAIAAJ&pg=PA140&lpg=PA140&dq=brown+soviet+spending+no+response+to+us+restraint&source=bl&ots=JqutNlB1MM&sig=ACfU3U0bi89tRhfUKwQDkIHRu8L34LtnTQ&hl=en&sa=X&ved=2ahUKEwjwjKShruHpAhXRoHIEHXunCFsQ6AEwAHoECAoQAQ#v=onepage&q=brown%20soviet%20spending%20no%20response%20to%20us%20restraint&f=false.

[60] See for example, James D. Morrow, "A Twist of Truth: A Reexamination of the Effects of Arms Races on the Occurrence of War," *The Journal of Conflict Resolution*, Vol. 33, No. 3 (September 1989), pp. 500-529.

[61] *The Intervention in Afghanistan and the Fall of Détente* (National Security Archive, 1996), available at https://nsarchive2.gwu.edu/carterbrezhnev/docs_intervention_in_afghanistan_and_the_fall_of_detente/fall_of_detente_transcript.pdf, p. 141.

are much less due to conscription and generally lower labor costs in the defense sector.[62] Moreover, the United States—as a global power relatively insulated geographically from the rest of the world—requires extensive and costly power projection capabilities to defend its overseas interests and maintain open sea lines of communication. The United States also has a global network of allies and strategic partners that it is pledged to protect through formal treaties and informal political agreements. The discrepancies between the U.S. role in world affairs—and the requirements imposed on the United States in fulfilling this leading role—and the legitimate defense needs of other countries make simple comparisons of defense spending an ill-suited and inappropriate metric for assessing arms races.

Some critics focus on the amount of spending on nuclear programs to advocate against what they perceive as an indication of a spiraling arms race. For example, one estimate suggests U.S. nuclear weapons spending will increase next year by 19 percent, rising to $44.5 billion.[63] Others, including the Congressional Budget Office, have estimated the cost of U.S. nuclear modernization and sustainment programs will exceed $1 trillion over the next three decades.[64] This is because decades of neglect have resulted in all three "legs" of the U.S. nuclear Triad facing block obsolescence and needing to be modernized simultaneously if the efficacy and reliability of nuclear deterrence is to remain the priority that national decision leaders of both parties have asserted it is. Yet, these estimates lack appropriate context, as the nuclear weapons portion of the overall U.S. defense budget continues to hover at historic lows—roughly 3-4 percent—and is expected to increase to 6-7 percent at the height of the modernization effort.[65] This is in contrast to nearly 11 percent of the DoD budget invested in nuclear forces in the 1980s and more than 17 percent of the DoD budget in the early 1960s.[66] The defense budget itself comprises only a relatively small and historically low share of the U.S. economy as well, less than 3 percent of the nation's GDP compared to more than 7 percent in the 1980s and more than 11 percent in the 1960s.[67]

Setting aside the difficulties of accurately measuring defense spending, military programs tend to have long lead times and by the time they reach the procurement phase, they have been "on the books" for years if not decades. Their introduction into the force may not necessarily be indicative of an arms race; rather it might reflect an older weapon system reaching the end of its operational

[62] See for example, Sydney J. Freedberg Jr., "US Defense Budget Not That Much Bigger Than China, Russia: Gen. Milley," *Breaking Defense*, May 22, 2018, available at https://breakingdefense.com/2018/05/us-defense-budget-not-that-much-bigger-than-china-russia-gen-milley/.

[63] Kingston Reif and Shannon Bugos, "Surging U.S. Nuclear Weapons Budget a Growing Danger," Arms Control Association, *Issue Briefs*, Vol. 12, Issue 3, March 19, 2020, available at https://www.armscontrol.org/issue-briefs/2020-03/surging-us-nuclear-weapons-budget-growing-danger.

[64] Aaron Mehta, "America's nuclear weapons will cost $1.2 trillion over the next 30 years," *Defense News*, October 31, 2017, available at https://www.defensenews.com/breaking-news/2017/10/31/americas-nuclear-weapons-will-cost-12-trillion-over-the-next-30-years/.

[65] Justin Doubleday, "Ahead of hearings, DoD officials claim 'sensible' approach to nuclear modernization," *InsideDefense.com*, February 24, 2020, available at https://insidedefense.com/daily-news/ahead-hearings-dod-officials-claim-sensible-approach-nuclear-modernization.

[66] Department of Defense, *Nuclear Posture Review*, February 2018, p. XI, available at https://media.defense.gov/2018/Feb/02/2001872886/-1/-1/1/2018-NUCLEAR-POSTURE-REVIEW-FINAL-REPORT.PDF.

[67] Dinah Walker, *Trends in U.S. Military Spending*, Council on Foreign Relations, July 15, 2014, available at https://www.cfr.org/report/trends-us-military-spending.

life cycle and the need to replace it so not to lose a useful military capability. A rationale for the deployment of a weapon system might change overtime and such changes might reflect political as much as technological and operational developments. For these reasons, considering new weapons systems' introduction dates into the force as indicative of an arms race is also insufficient. Even more difficult is weighing technological and doctrinal impacts on the performance of different weapons systems *in an interaction with their appropriate adversarial counter-systems*.

A simplistic metric for judging the existence of an arms race might be the number of number weapons built or possessed by both sides. Yet history demonstrates that the United States nuclear arsenal reached its peak in the 1960s and has steadily declined since. In fact, the number of U.S. nuclear weapons in the stockpile reportedly went from more than 30,000 at the height of the Cold War to several thousand today. Unclassified estimates show that the size of the U.S. nuclear stockpile has shrunk to its lowest level since the Eisenhower Administration. As the 2018 *Nuclear Posture Review* (NPR) noted, the United States "has reduced the nuclear stockpile by over 85 percent since the height of the Cold War and deployed no new nuclear capabilities for over two decades."[68] If stockpile numbers are any indicator, the United States has steadily moved away from an arms race. Soviet stockpile numbers also reportedly declined from their Cold War peak of roughly 45,000.[69] Therefore, the notion of an arms race based on quantitative metrics of stockpile size runs counter to historical reality. Even the explosive power of the U.S. nuclear arsenal has steadily diminished since the height of the Cold War as technology improved, allowing greater accuracy and smaller-yield weapons.

Despite these important nuances and considerations, the mechanistic and simplistic notion of an action-reaction arms race led by the United States continues to be promulgated in the public debate, with some expressing concern that U.S. missile defense developments will inevitably prompt a Russian offensive counter-response. At a recent congressional hearing, Rep. Seth Moulton (D-MA) asked, "Are we just in a never-ending escalatory cycle because every time we develop more advanced missile defense, the Russians develop more advanced architecture?"[70] This view was challenged by Deputy Assistant Secretary of Defense Robert Soofer, who emphasized that U.S. missile defenses are oriented toward and capable against rogue states like North Korea, not Russia or China. Russian statements that suggest its strategic nuclear programs are a reaction to U.S. missile defense developments are not only false, Soofer noted, but intended "to influence our allies and members of Congress."[71] Russian and Chinese commentators on U.S. programs clearly understand the action-reaction argument and regularly use it in opposition to U.S. programs.

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[68] Department of Defense, *Nuclear Posture Review*, February 2018, op. cit., p. v.

[69] Hans M. Kristensen and Robert S. Norris, "Global nuclear weapons inventories, 1945–2013," *Bulletin of the Atomic Scientists*, 2013, Vol. 69, Issue 5, pp. 75-81, available at https://www.tandfonline.com/doi/full/10.1177/0096340213501363.

[70] William Cole, "Hawaii defense is the key in upcoming ICBM shoot-down test," *Honolulu Star-Advertiser*, March 30, 2020, available at https://www.staradvertiser.com/2020/03/30/hawaii-news/hawaii-defense-key-in-upcoming-shoot-down-test/.

[71] Quoted in Ibid.

In general, virtually all of the former government officials interviewed as part of this study ascribed different motivations to the Soviet Union (and later Russia) with respect to nuclear developments as compared to the United States. Some saw Soviet behavior as an attempt to "catch up" with the United States until the mid-1960s. But most observed that Soviet nuclear developments after that point were less a reaction to U.S. developments than an attempt to accrue unilateral strategic advantages in furtherance of their nuclear programs and in support of their geopolitical interests and ambitions.

Some of the reasons for the Soviet buildup of nuclear capabilities involved the desire for prestige and coercive power to support expansive Soviet geopolitical goals. Soviet (and later Russian) behavior was ascribed to their unique psychology, culture, and different "world view." Some suggested Russia's nuclear posture decisions today are motivated by various geo-strategic factors, including its lack of true allies, inferior conventional forces vis-à-vis the United States, the lack of a technologically sophisticated 21st century economy, and the presence of another nuclear power—China—on its Asian periphery. Russia was described as suffering from the loss of its global power status, with decisions being driven, in part, by a combination of economics, bureaucratic politics, technological capacity, and concerns over what the United States might do decades from now based on a presumed U.S. technological superiority. Soviet (and Russian) military behavior was attributed to a desire to undermine U.S. retaliatory capabilities and possess a coercive nuclear advantage that could be used to "intimidate" the United States strategically while gaining "tactical" superiority.

In addition, Soviet nuclear developments were said to be an outgrowth of the Soviet Union's historical experiences in World War II. Consequently, most interviewees believe that the Soviet Union never accepted the notion of strategic nuclear "parity," but rather sought superiority over the United States in nuclear forces and a preemptive nuclear strike capability as a means of deterring aggressive U.S. moves and ensuring their own security. This translated into a desire to be able to fight and win a nuclear war, should deterrence fail.

By contrast, U.S. motivations behind nuclear force decisions were generally thought by oral history participants to have been linked not only to specific Soviet or Russian actions but to general perceptions that Soviet behavior posed a significant and increasing threat to the United States and its allies. U.S. decision makers saw the Soviet Union as an expansionist power with global geopolitical and ideological ambitions hostile to the United States. Many interviewees noted that the Soviets were engaged in an extensive nuclear modernization effort for decades intended to undermine the U.S. deterrent globally and separate the United States from its allies, with some noting that U.S. nuclear modernization decisions were based primarily on the need to maintain an effective deterrent in the face of expanding Soviet nuclear and conventional capabilities and ageing U.S. nuclear systems.

There is, of course, a possibility that the United States could avoid the issue of arms racing altogether if it did not challenge adversary behavior, seek to defend its interests and allies globally, or deter aggression. But the consequences of such a stance were judged unacceptable during the Cold War and continue to be judged unacceptable today. A world order led by Communist

China and authoritarian Russia would be a different, much less secure, free, and prosperous world than a world order led by the United States.[72]

As this chapter illustrates, numerous factors shape a state's decision to develop, procure, and deploy weapons systems. These decisions reflect a whole host of internal and external factors. Understanding these nuances will help to paint a more accurate picture of changes in U.S. nuclear policy and force posture. To understand the relative weight of different factors, one must go beyond official documentation and understand events from the perspective of those who participated in them. The following chapters advance such an understanding with respect to the most significant inflection points in U.S. nuclear strategy since the 1960s until today.

[72] Robert Kagan, *The World America Made*, 1st ed. (New York: Alfred A. Knopf, 2012).

# Chapter III
# The U.S. Decision to Forego Missile Defense

*"In fact, the chief virtue of assured destruction may be that it removes the need to race—there is no reward for getting ahead."*[73]

In the early 1960s, the United States had both the strategic goal and the means of protecting the U.S. homeland against strategic nuclear attack. This included an extensive air and missile defense network. The Johnson Administration inherited the Nike-X development program, a successor to even earlier U.S. missile defense development programs, designed to protect the United States from Soviet ICBMs. In 1965, the Department of Defense authorized Bell Laboratories, developer of the Nike-X system, to modify it to provide defensive capabilities against a possible Nth country threat, namely the People's Republic of China (PRC), in addition to more sophisticated Soviet threats.[74] Consequently, the program was conceived to provide defensive coverage for the entire continental United States.[75]

But the goal to protect the U.S. homeland rapidly receded in priority as the expansion of Soviet ICBM forces rendered the feasibility of highly effective U.S. homeland protection technically and financially questionable. Secretary of Defense McNamara openly discussed his expectation that the Soviet Union would react to the U.S. deployment of strategic missile defense by adding to its offensive capabilities--thereby nullifying at relatively lower cost any meaningful U.S. defensive capability. Consequently, the United States came to rely instead on mutual deterrence, i.e., creating and maintaining a "balance of terror," to prevent Soviet attack rather than on active and passive U.S. defenses to protect against it. It appears that on the basis of an expected disadvantageous action-reaction interaction, U.S. policy moved away from missile defense to protect U.S. society against Soviet strategic missiles. Ironically perhaps, this decision appears to be a prominent example of an action-inaction interaction (led by the Soviet Union) based on the U.S. expectation of an action-reaction interaction. In the words of Secretary of Defense Robert McNamara:

> The Soviets have it within their technical and economic capacity to prevent us from achieving a posture that would keep our immediate fatalities below some level. They can do this, for example, by offsetting any increases in our defenses by increases in their missile forces. In other words, if we were to try to assure survival of a very high percent of our population, and if the Soviets were to choose to frustrate this attempt because they

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[73] Richard L. Garwin and Hans A. Bethe, "Anti-Ballistic-Missile Systems," *Scientific American*, March 1968, Vol. 218, No. 3, pp. 23-24, available at https://fas.org/rlg/03%2000%201968%20Bethe-Garwin%20ABM%20Systems.pdf.

[74] *ABM Research & Development at Bell Laboratories - Project History* (Whippany, NJ: Bell Laboratories, October 1975), p. I-43, available at http://www.decadecounter.com/vta/pdf/ABM%20Research%20&%20Development%20at%20Bell%20Laboratories%20-%20Project%20History%20[1975-10].pdf.

[75] Ibid.

> viewed it as a threat to their Assured Destruction capability, the extra cost to them would appear to be substantially less than the extra cost to us.[76]

The decision to rely almost exclusively on "deterrence by threat of punishment" for protection of the United States was a major inflection point in U.S. national security and foreign policy. Never before in U.S. history had the government decided to give its adversary's weapons a "free ride" to U.S. territory or, as a matter of official policy, to allow an adversary to hold U.S. citizens hostage in the interest of "stability." However, sustaining a condition of mutual vulnerability for the purpose of deterrence "stability" was the officially expressed U.S. rationale for the 1972 U.S.-Soviet Anti-Ballistic Missile (ABM) Treaty, which strictly limited strategic missile defense development and deployment.[77]

By the early 1970s, the United States sought to codify mutual deterrence (based on the principle of "mutual assured destruction") with the Soviet Union through arms control, which was intended to limit the expansion of Soviet counterforce capabilities and preserve the balance of terror. Strategic missile defenses came to be regarded in the United States as an obstacle to achieving negotiated offensive arms limitations via arms control because U.S. deployment of missile defense was expected—per a U.S.-led action-reaction cycle—to compel the Soviet Union to expand its offensive missile capabilities to overcome U.S. defenses. Consequently, it was argued that U.S. strategic missile defense would be both ineffective and an impediment to arms control—as well as prohibitively expensive.

This view was not shared by the Soviet Union, which considered protecting itself an imperative and did not subscribe to the view that missile defenses were somehow destabilizing. When Secretary of Defense McNamara presented his arguments against strategic missile defense to Soviet Premier Aleksey Kosygin in 1967, the latter replied, "An antimissile system may cost more than an offensive one, but it is intended not for killing people but for saving human lives."[78] Nevertheless, for the reasons identified above, as the Soviet Union increased its strategic missile capabilities, the United States moved away from the goal of defending against Soviet strategic range missiles.

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[76] *Testimony of Secretary of Defense Robert McNamara Before the House Armed Services Committee*, March 8, 1966, p. 7341, available at https://books.google.com/books?id=tfvUOmTUFfQC&pg=PA7341&lpg=PA7341&dq=mcnamara+Assured+Destruction+capability,+the+extra+cost+to+them+would+appear+to+be+substantially+less+than+the+extra+cost+to+us&source=bl&ots=XGPkULuFjG&sig=ACfU3U2esEX4j50R1nNB1D7j0X7y3f7XLg&hl=en&sa=X&ved=2ahUKEwi57pjSs6rqAhU0kHIEHainAwQQ6AEwA3oECAgQAQ#v=onepage&q=mcnamara%20Assured%20Destruction%20capability%2C%20the%20extra%20cost%20to%20them%20would%20appear%20to%20be%20substantially%20less%20than%20the%20extra%20cost%20to%20us&f=false.

[77] The ABM Treaty, a part of the SALT I agreements, limited both countries' missile defense deployments to two sites: one to defend its offensive forces and one to protect its National Capital Region. The ABM Treaty also imposed qualitative and quantitative restrictions on missile defense research and development. Because of the ABM Treaty, the construction of a missile defense site in Montana was terminated. Although construction of the site in North Dakota proceeded, it was only operational from October 1975 to February 1976 when Congress decided to stop funding it. The United States decided not to proceed with construction of a missile defense site around Washington, D.C., and the ABM Treaty was amended in 1974 to permit only one missile defense site each for the United States and the Soviet Union.

[78] David S. Yost, *Soviet Ballistic Missile Defense and the Western Alliance* (Cambridge and London: Harvard University Press, 1988), p. 98.

However, despite McNamara's general views against strategic missile defense, in 1967 the United States decided to pursue a "thin" strategic defense program to provide protection against a prospective Chinese missile attack.[79] On September 18, 1967, Secretary McNamara announced that the United States would pursue a PRC oriented ABM system—the Sentinel program. The Sentinel system was also expected to provide protection against accidental launches (from anywhere).[80]

However, in line with the action-reaction dynamic, the Nixon Administration—in anticipation of a Soviet reaction—expressed concern that the Sentinel program could escalate an arms race with the Soviet Union and wished to signal to the Soviet Union that this was not so. In a hearing before the Senate Committee on Foreign Relations, Subcommittee on International Organizations and Disarmament Affairs, Secretary of Defense Melvin Laird stated:

> …the Sentinel system was ambiguous, at best. It was interpreted by some as the beginning of a 'thick' defense of our cities against Soviet attack. In fact, it could have been used for precisely that purpose. It could also have been construed as a system designed to protect our cities from surviving Soviet missiles after a surprise attack by the United States. Our review, therefore, convinced us that the original Sentinel was potentially provocative. As such, it appeared to us to be a step toward, rather than away from, an escalation of the arms race.[81]

Consequently, the Nixon Administration initiated a revised Safeguard missile defense program—a more modest system intended to provide priority protection for U.S. strategic retaliatory capabilities rather than cities. On March 14, 1969, President Richard Nixon announced this revised Safeguard missile defense program. The explicit mission of the program was to protect U.S. "land-based retaliatory forces against a direct attack by the Soviet Union."[82] This goal fit nicely with the well-accepted deterrence requirement that U.S. strategic forces remain survivable against the possibility of a nuclear "first strike." According to documentation prepared for the U.S. Army, the Safeguard program reduced the number of missile defense sites from 17 to 12, with initial deployments around U.S. ICBM fields in Grand Forks, ND, and Malmstrom, MT. Advanced preparation for five other sites was approved in 1970.[83]

Criticism of U.S. strategic missile defense, whether the Sentinel or Safeguard program, was based on the action-reaction narrative expressed by Secretary McNamara. Despite the Soviet Union's own missile defense efforts and on-going expansion of offensive nuclear capabilities,

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[79] The PRC joined the nuclear club in 1964.

[80] United States Congress, *Congressional Record: Proceedings and Debates of the 90th Congress* (Washington, D.C.: U.S. Government Printing Office, 1969). p. 25789, available at https://books.google.com/books?id=kifo8i7eJDwC.

[81] United States Congress Senate Committee on Foreign Relations Subcommittee on International Organization and Disarmament Affairs, *Strategic and Foreign Policy Implications of ABM Systems: Hearings Before the United States Senate Committee on Foreign Relations, Subcommittee on International Organization and Disarmament Affairs*, 91st Congress, 1st Session, pts. 1-3 (Washington, D.C.: U.S. Government Printing Office, 1969), available at https://books.google.com/books?id=UAo4ugEACAAJ, p. 169.

[82] Richard Nixon, *Statement on Deployment of the Antiballistic Missile System*, accessed March 22, 2020, available at https://www.presidency.ucsb.edu/documents/statement-deployment-the-antiballistic-missile-system.

[83] *ABM Research & Development at Bell Laboratories—Project History*, op. cit., p. I-46.

notable U.S. figures insisted that U.S. missile defense would lead an action-reaction arms race with the Soviet Union. For example, some contended that "deployment of Sentinel/Safeguard now would probably start a new round in the arms race, and would seriously impede the conclusion of an arms control agreement."[84] President Kennedy's former speechwriter asserted that "history has made all too clear that the Soviet Union's ultimate response to an American ABM is likely to be an acceleration in its own missile development in order to overwhelm, offset, and adjust for such a defense."[85] Senator Eugene McCarthy stated:

> …the introduction of sophisticated antiballistic missile systems and new missiles equipped with multiple warheads threatens to make the situations unstable. With the deployment of such weapons systems, each side will become concerned as to whether in the event of a preemptive attack it will be able to inflict sufficient damage in retaliation—if not, its deterrent will not be credible. The arms race will thus be impelled to a new intensity.[86]

And as Secretary McNamara stated, "Were we to deploy a heavy ABM system throughout the United States, the Soviets would clearly be strongly motivated to so increase their offensive capability as to cancel out our defensive advantage."[87] He further noted that "we can be certain that the Soviets will react to offset the advantage we would hope to gain," citing this as an example of "the action-reaction phenomenon."[88]

Critics of U.S. strategic missile defense promoted an alternative to this presumed U.S.-led arms race cycle. This alternative was a U.S. move away from strategic missile defense—leading to a hoped-for inaction-inaction cycle which would help promote arms control and end the arms race. For example, the Federation of American Scientists declared that "agreement on an ABM limitation… would provide a major improvement in our—and the world's—security and would break the action-reaction cycle of the arms race."[89] A senior official at the Arms Control and Disarmament Agency, Herbert Scoville, asserted that if the United States halted its strategic missile defense deployment programs, the arms race could be brought to an end because "…in such a climate, there would be little excuse for the Russians to continue building additional ICBM

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[84] Abram Chayes, Jerome Wiesner, George Rathjens, Steven Weinberg, "Overview," in Abram Chayes, Jerome Wiesner, eds., *ABM: An Evaluation of the Decision to Deploy an Antiballistic Missile System*, Signet Broadside; #7 (New York: New American Library, January 1, 1969), p. 59.

[85] Theodore Sorensen, "The ABM and Western Europe," in Ibid., p. 181.

[86] United States Congress, *Congressional Record: Proceedings and Debates of the 91st Congress, 1st Session*, Vol. 115, Part 14 (Washington, D.C.: U.S. Government Printing Office, 1969), available at https://books.google.com/books?id=kifo8i7eJDwC, p. 18775.

[87] *Remarks by Secretary of Defense Robert S. McNamara Before United Press International Editors and Publishers*, op. cit.

[88] Ibid.

[89] Testimony of Marvin L. Goldberger, Senate Committee on Appropriations, *Department of Defense Appropriations for Fiscal Year 1972* (92nd Congress, 1st Session), May 25, 1971, p. 865, available at https://books.googleusercontent.com/books/content?req=AKW5QadPtoCEk_Ju_F8jkbDLCq1Rar2kRQ58yA4dMty9Nb16hQYLVOpWHLRgaIz7eWc6Ff6z_JNxVMJrzmymt3eHC4xetM9PCZEt15GZnv9mcIpVsVvLJ81R3YV55z7X1Jw5mpZp6VIQaINpjPJxdKgrmkz4VimYlrebsed6Ueecp8LFuNm1j8ImvYhLEdVGVS8M_7MX-jP7SL2iO-ndegBXpcz0T_1KuQdV3osONHo9r9w2vS1gBPWyzUKkrLln9bSTp2LBmOsXwXffIdDIlmIsOCdTS92UbA.

sites. In such a situation of frozen stable deterrence, they would not be needed."[90] George Rathjens asserted similarly:

> Actually, with the right kind of ABM agreement, incentive for either side to expand its offensive missile forces or to put MIRVs on them would be much reduced since, in the absence of concern about adversary ABM deployment, each side could be confident that it has an adequate deterrent even if it believed that a large fraction of its strategic forces might be destroyed by preemptive attack. That, of course, is precisely why an ABM agreement is so important.[91]

Jerome Wiesner, the former Chairman of President Kennedy's Science Advisory Committee, argued that U.S. unilateral disarmament steps could "even start a peace race" in which both sides realize that large numbers of offensive nuclear forces are unnecessary and resources would be better spent on other priorities, e.g. social programs.[92]

These arguments posited that if the United States stopped its missile defense program, the Soviet Union would halt its fast-paced strategic offensive missile program, i.e., U.S.-led inaction-inaction. Despite this contention, however, the Soviet Union actually accelerated the expansion of its strategic offensive capabilities after the United States scaled down, refocused, and eventually terminated its deployment of strategic missile defenses.

The criticism that U.S. actions are primarily responsible for the nuclear decisions of other countries was also applied to the case of China, as if the leaders of China and the Soviet Union were governed by the same deterrence considerations and calculations in their respective decision making processes. As Mason Wildrich, assistant general counsel for the U.S. Arms Control and Disarmament Agency stated in 1969, "The implications of an ABM system directed primarily against China are no more encouraging for the policy of nonproliferation. The United States deployment of a thin, China-oriented ABM system might simply cause Peking to accelerate its own offensive missile production, much as we would expect the Soviet Union to respond to U.S. deployment of a Soviet-oriented ABM."[93]

As the United States scaled down its missile defense systems without witnessing a slowdown in Soviet nuclear strategic offensive missile deployments, experts rationalized the continued Soviet buildup as a reaction to even limited U.S. missile defense programs. Nothing but a complete elimination of U.S. damage limitation efforts, including missile defense, would do to stop this purported U.S.-led arms race cycle. George Rathjens argued per the action-reaction thesis that, "to the extent that one accepts the action-reaction view of the arms race, one is forced to conclude

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[90] Herbert Scoville, "Next Steps in Limiting Strategic Arms," *Bulletin of the Atomic Scientists*, Vol. 28, No. 3 (March 1972), p. 11.

[91] George Rathjens, "A Breakthrough in Arms Control," *Bulletin of the Atomic Scientists*, Vol. 27, No. 6 (June 1971), p. 5.

[92] *AMB, MIRV, SALT, and the Nuclear Arms Race: Hearings Before the Subcommittee on Arms Control, International Law and Organization of the Committee on Foreign Relations*, U.S. Senate, 91st Congress 2nd Session (Committee on Foreign Affairs, 1970), available at https://babel.hathitrust.org/cgi/pt?id=uc1.$b643705&view=1up&seq=7.

[93] Mason Willrich, "ABM and Non-Proliferation," in Chayes and Wiesner, eds., op. cit., p. 203.

that virtually anything we might attempt to do in order to reduce damage to ourselves in the event of war is likely to provoke an escalation in the arms race."[94]

Additionally, some analysts argued that even limited U.S. missile defenses would complicate negotiation of a Strategic Arms Limitation Talks (SALT) Treaty with the Soviet Union. As a result, some called for the *pre-emptive* cancellation of U.S. missile defense efforts in order to facilitate a successful outcome to the SALT negotiations. Ambassador Arthur Goldberg argued with respect to U.S. Sentinel/Safeguard deployments that neither the United States nor the Soviet Union should "take actions which would prejudice the chances of such talks to put a halt to an escalating arms race, and to reduce existing nuclear arsenals."[95]

The U.S. decision to deploy a ballistic missile defense system was criticized by MIT Professor Bernard Feld as "unnecessarily provocative" and "bound to elicit a response from the Russians, most likely in the form of an increase in the number of their deployed ICBMs but probably also in further Russian ABM deployment beyond the present ineffective and obsolete system surrounding Moscow." "Hence," he argued, "our ABM is likely to set off a new, upward spiral in the nuclear arms race."[96]

This viewpoint was shared by many U.S. academics and senior officials, active and former, as well as elements of the U.S. intelligence community. For example, a National Intelligence Estimate (NIE) concluded that "the large U.S. ICBM force almost certainly influences the USSR to increase its force, and U.S. deployment of ballistic missile defenses might incline them toward even higher numbers."[97] Herbert York, Director of Defense Research and Engineering in the Eisenhower and Kennedy Administrations noted that U.S. damage limitation strategies in general were "accelerating elements in the arms race."[98] Alain Enthoven and K. Wayne Smith, Assistant Secretary of Defense for Systems Analysis and Special Assistant to the Assistant Secretary of Defense for Systems Analysis, respectively, under Secretary McNamara, described the action-reaction dynamic as follows:

> …any attempt on our part to reduce damage to our society would put pressure on the Soviets to strive for an offsetting improvement in their assured-destruction forces, and vice versa. Each step by either side, however sensible or precautionary, would elicit a precautionary response from the other side. This 'action-reaction' phenomenon is central to all strategic force planning issues as well as to any theory of an arms race."[99]

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[94] Rathjens, "The Dynamics of the Arms Race," op. cit., p. 22.

[95] Arthur Goldberg, "The Attitude of the World Community toward the ABM," in Chayes and Wiesner, eds., op. cit., p. 213.

[96] Bernard Feld, "ABM and Arms Control," in Chayes and Wiesner, eds., op. cit., p. 190.

[97] National Intelligence Estimate (NIE) 11-8-65, *Soviet Capabilities for Strategic Attack*, 1965, p. 6, available at https://www.cia.gov/library/center-for-the-study-of-intelligence/csi-publications/books-and-monographs/Est%20on%20Soviet%20Strategic.pdf.

[98] York, op. cit., p. 26.

[99] Alain Enthoven and K. Wayne Smith, *How Much Is Enough? Shaping the Defense Program, 1961-1969* (Santa Monica, CA: RAND Corporation, 2005), pp. 175-176.

However, the scaling down and ultimate elimination of U.S. strategic missile defense deployment efforts in 1976 did not slow down the continuing expansion of Soviet nuclear capabilities. This Soviet drive to "parity" was portrayed as *beneficial* for U.S. arms control efforts and for the deterrence relationship between the two countries. As Herbert York declared, "The time [for arms control negotiations with the Soviet Union] is propitious in another sense: both sides will be discussing the matter from a position of parity."[100] Additionally, he stated that "this parity seems reasonably stable and likely to endure for several years."[101]

Some had even stronger faith in the U.S. ability to shape the Soviet Union's behavior into a more benign form by taking unilateral disarmament steps. George Rathjens and George Kistiakowsky, President Eisenhower's science advisor, attributed U.S. views to the Soviet Union—a form of "mirror-imaging"—with their assertion that, "there is the growing popular realization—at least in the U.S. *and presumably also in the U.S.S.R.*—that each side already has an enormous 'overkill' capacity with respect to the other, and that further escalation in strategic-force levels would entail tremendous costs and new dangers at a time when both countries are confronted with a host of other pressing demands on their resources."[102]

This thinking proved fallacious. If there was a realization that nuclear force level increases were too costly or too dangerous in the Soviet Union at the time, it was not reflected in Soviet nuclear deployments. A former U.S. official interviewed for this study commented that the greatest growth in Soviet strategic nuclear offensive forces came *after* the United States signed the ABM Treaty. The number of Soviet strategic nuclear weapons reportedly grew from approximately 2,500 in 1972 to more than 10,000 in the late-1980s.[103] Other published unclassified, unofficial estimates indicate the total Soviet nuclear weapons stockpile nearly tripled from roughly 15,000 in 1972 to more than 40,000 at its peak in the mid-1980s.[104] By contrast, estimates show the total U.S. nuclear weapons stockpile reportedly peaked in the early to mid-1970s at about 28,000 and steadily declined since then.[105] As Colin Gray summarized developments:

> An argument central to the case against urban area ABM defense was that its banning by treaty would break the action-reaction cycle of the arms race: The Soviet Union would not need to develop and deploy offensive forces to overcome such an American deployment (in order to preserve their assured destruction capability). It is a matter of history that the ABM treaty banned the ABM defense of U.S. cities, but Soviet offensive force improvements have marched steadily onward. The action-reaction thesis was logical and

[100] York, op. cit., p. 29.

[101] Ibid.

[102] George W. Rathjens and George B. Kistiakowsky, "The Limitation of Strategic Arms," *Scientific American*, Vol. 222, No. 1 (January 1970), pp. 19-29 (Emphasis added).

[103] See, Amy F. Woolf, *Russia's Nuclear Weapons: Doctrine, Forces, and Modernization,* CRS Report R45861, Congressional Research Service, July 20, 2020, pp. 8-9, available at https://fas.org/sgp/crs/nuke/R45861.pdf. Also see, Robert S. Norris and Thomas B. Cochran, *Nuclear Weapons Databook: US-USSR/Russian Strategic Offensive Nuclear Forces 1945-1996* (Washington, D.C.: National Resources Defense Council, Inc., January 1997), available at https://fas.org/nuke/norris/nuc_01009701a_181.pdf.

[104] Kristensen and Norris, op. cit., p. 78.

[105] Ibid.

> reasonable; it just happened to be wrong (it neglected the local color, the domestic engines of the arms competition).[106]

Despite the ABM Treaty's premise (in the United States) that strategic missile defense systems would trigger an arms race, and that their limitation would allow each side to forego additional nuclear capabilities, as noted above, the Soviet Union accelerated the expansion of its strategic offensive missile capabilities. By precluding active nationwide missile defenses, the ABM Treaty enabled increased Soviet investment in additional offensive nuclear capabilities intended to hold U.S. retaliatory capabilities at risk and eliminated U.S. defenses against those Soviet missiles.

As LTG William Odom, former Director of the National Security Agency, recounted, based on the comments of Col. Gen. Nikolai Detinov, a Soviet defense ministry official with significant responsibility for Soviet arms control positions, "the ABM Treaty appeared to have allowed a considerably larger number of offensive nuclear weapons in the Soviet arsenal than there would have been without it."[107] As another analyst noted, "the treaty plainly enabled the Soviets to avoid an expensive competition in a domain of U.S. technological advantage. By relieving the Soviets of a resource dilemma, the ABM Treaty allowed them to invest more in other capabilities, including ICBMs."[108] This was precisely the opposite effect that Henry Kissinger had predicted when he testified, "By setting a limit to ABM defenses, the [ABM] [T]reaty not only eliminates one area of dangerous defensive competition, but it reduces the incentive for continuing deployment of offensive systems. As long as it lasts, offensive missile forces have, in effect, a free ride to their targets."[109]

As a contributor to this study has noted previously:

> Subsequent developments, however, were the reverse of the BMD [ballistic missile defense] opponents' confident predictions, demonstrating the fragility of the action–reaction model. In the absence of U.S. missile defense, the Soviet Union pursued the greatest buildup of strategic offensive missile capabilities in history…. Foregoing missile defense hardly checked the Soviet Union's incentives to expand its missile capabilities.[110]

This Soviet buildup stood in marked contrast to an earlier prediction of the intelligence community that asserted, "We do not believe that the USSR aims at matching the U.S. in numbers of intercontinental delivery vehicles. Recognition that the U.S. would detect and match or overmatch

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[106] Colin S. Gray, "Nuclear Strategy: The Case for a Theory of Victory," *International Security*, Vol. 4, No. 1, Summer 1979, p. 85, footnote 68. It should be noted that Russia's ABM system protects an urban area—Moscow.

[107] William E. Odom, *The Collapse of the Soviet Military* (New Haven and London: Yale University Press, 1998), p. 71, available at https://books.google.com/books?id=Wojkd3uzVPgC&pg=PP1#v=onepage&q&f=false.

[108] Yost, "Strategic Stability in the Cold War: Lessons for Continuing Challenges," op. cit., p. 22.

[109] Henry Kissinger quoted in, *Military Implications of the Treaty on the Limitation of Anti-Ballistic Missile Systems and the Interim Agreement on Limitation of Strategic Offensive Arms*, Senate Committee on Armed Services, 92nd Congress, 2nd session, 1972, p. 121.

[110] Keith B. Payne, "Action–Reaction Metaphysics and Negligence," *The Washington Quarterly*, Autumn 2001, p. 114, available at https://www.nipp.org/wp-content/uploads/2014/11/09-payne.pdf.

such an effort, together with economic constraints, appears to have ruled out this option."[111] Note in this projection that the action-reaction dynamic was expected to constrain the Soviet Union's offensive force goals and programs in the same way it constrained U.S. strategic missile defense goals and programs. Clearly, however, it did not apply to Soviet offensive force goals as expected.

The U.S. Arms Control and Disarmament Agency described the purpose and value of the ABM Treaty as facilitating mutual vulnerability to a missile attack, noting: "Each country thus leaves unchallenged the penetration capability of the other's retaliatory missile forces."[112] The promise of the ABM Treaty's moderating effects on an arms race was also enshrined in its preamble, which stated that "effective measures to limit anti-ballistic missile systems would be a substantial factor in curbing the race in strategic offensive arms and would lead to a decrease in the risk of outbreak of war involving nuclear weapons."[113] Judging from the scale of Soviet strategic offensive and defensive missile programs after the ABM Treaty was signed, the Soviet Union obviously did not adhere to the U.S. concept of a stable balance of terror or the associated action-reaction logic that U.S. defensive systems were the reason for its missile buildup, nor did the absence of U.S. defenses lead to an inaction-inaction dynamic ending that buildup—however much domestic critics expressed confidence in both action-reaction and inaction-inaction narratives.[114]

**Summary**

Critics of U.S. missile defense efforts claimed that these efforts would directly drive an acceleration of the arms race with the Soviet Union and that their cessation would lead to a static balance of strategic offensive forces at roughly similar levels. They argued that once the Soviet Union achieved this parity, it would not seek more offensive nuclear forces as long as the United States would forego strategic missile defense deployments. As Jerome Wiesner argued in his 1967 article declaring the Cold War dead, "If the ABM systems are built, there will certainly be further large increases in military expenditures for new and more sophisticated weapons as both sides jockey to maintain a credible deterrent to try to protect their citizens from the horrors of nuclear war."[115] Additionally, critics portrayed U.S. missile defense programs as an obstacle to reaching an arms control agreement with the Soviet Union on strategic offensive arms.

The historical record is clear: based largely on the expectation of disadvantageous costs associated with an action-reaction dynamic and deterrence instability, the United States chose to

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[111] National Intelligence Estimate (NIE) 11-8-64, *Soviet Capabilities for Strategic Attack*, October 8, 1964, p. 2, available at https://www.cia.gov/library/center-for-the-study-of-intelligence/csi-publications/books-and-monographs/Est%20on%20Soviet%20Strategic.pdf.

[112] United States Arms Control and Disarmament Agency, *Arms Control and Disarmament Agreements: Texts and Histories of Negotiation*s (Washington, D.C.: USGPO, 1982), p. 137.

[113] *Treaty Between The United States of America and The Union of Soviet Socialist Republics on The Limitation of Anti-Ballistic Missile Systems* (Washington, D.C.: U.S. Department of State, 1972), available at https://www.state.gov/t/avc/trty/101888.htm#text.

[114] For more information on the Soviet missile defense programs see, William Van Cleave, *Fortress USSR: The Soviet Strategic Defense Initiative and the U.S. Strategic Defense Response* (Menlo Park, CA: Stanford University, Hoover Institution Press, 1986).

[115] Jerome B. Wiesner, "The Cold War Is Dead, But the Arms Race Rumbles On," *Bulletin of the Atomic Scientists*, Vol. 23, No. 6 (June 1, 1967), pp. 5-9, available at https://doi.org/10.1080/00963402.1967.11455084.

forego strategic missile defense, and on the basis of inaction-inaction expectations, pursued the ABM Treaty in 1972. While many hailed Soviet agreement to the ABM Treaty as indicative of Soviet acceptance of a balance of terror and parity, it appears instead that the Soviet Union pursued the ABM Treaty to free resources for its offensive missile program and to limit U.S. competitive advantages in an area that could challenge its nuclear missile forces.[116] The Soviet Union accelerated its nuclear strategic offensive force build up, even as the United States scaled down and eventually terminated its strategic missile defense efforts.

The available evidence demonstrates convincingly that the U.S. decision to forego strategic missile defense was largely the result of a U.S. belief in the action-reaction dynamic and that the United States pursued the ABM Treaty in the mistaken expectation that by doing so it would mitigate Soviet motives for further building up its strategic missile capabilities, i.e., inaction-inaction. Available evidence also demonstrates that the U.S. decision to forego missile defenses was followed by an acceleration of the Soviet buildup of strategic offensive arms. The notion that this decision would have the opposite effect on Soviet behavior is contrary to the historical record.

[116] As a CIA analysis at the time concluded, "Soviet agreement to this treaty probably reflects a desire to limit competition in an area where the US had significant technical advantages and stood to lengthen its lead. In this regard, the Soviets would believe that they gave up little and gained substantial benefits," in *Soviet Nuclear Doctrine: Concepts of Intercontinental and Theater War* (Langley, VA: Central Intelligence Agency, June 1973), p. 4, available at https://www.cia.gov/library/readingroom/docs/DOC_0000268107.pdf.

# Chapter IV
# The U.S. Movement to Develop "Limited Nuclear Options"

*"…The Soviets have decided that they have lost the quantitative race, and they are not seeking to engage us in that context. It means there is no indication that the Soviets are seeking to develop a strategic nuclear force as large as ours."*[117]

In the 1960s and 1970s, the Soviet nuclear buildup included a dramatic increase in the number and accuracy of Soviet ICBM warheads, despite U.S. attempts to limit the threat to U.S. retaliatory capabilities through arms control. Soviet improvements and capability increases meant that for the first time in U.S. history, the United States was vulnerable to a devastating missile attack by an adversary that could credibly threaten to destroy the U.S. homeland. At the same time, the USSR also increased its conventional and nuclear capabilities in Europe.

This new situation caused major apprehension on the part of U.S. allies in Europe because they relied on the United States for their own defense from a large-scale Soviet attack. The Soviet buildup and consequent unprecedented vulnerability of the U.S. homeland to missile attack led to several significant and enduring changes in U.S. policy and strategy, particularly with regard to U.S. extended deterrence requirements and the assurance of allies.[118]

Contrary to the approach taken by the United States, which sought to preserve a balance of terror, the Soviet Union did not subscribe to its own vulnerability in a "mutual assured destruction" deterrence relationship. During this time period, the Soviet Union's nuclear force posture and programs developed in ways that offset initial U.S. nuclear force advantages, consistent with their primary organizing principle of seeking the ability to fight and prevail in a nuclear conflict should it occur. As former Harvard professor and Soviet scholar Richard Pipes noted, U.S. and Soviet nuclear doctrines "are starkly at odds." Pipes explained the contrast in these terms:

> The prevalent U.S. doctrine holds that an all-out war between countries in possession of sizable nuclear arsenals would be so destructive as to leave no winner; thus resort to arms has ceased to represent a rational policy option for the leaders of such countries vis-à-vis one another…. Soviet doctrine, by contrast, emphatically asserts that while an all-out nuclear war would indeed prove extremely destructive to both parties, its outcome would

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[117] "Is Russia Slowing Down in Arms Race?," *US News & World Report*, April 17, 1965, cited in *Congressional Record: Proceedings and Debates of the 89th Congress, 1st Session* (Washington, D.C.: United States Government Printing Office, 1965), available at https://books.google.com/books?id=TeJpU6M92PIC&pg=PA7271&lpg=PA7271&dq=mcnamara+%22there+is+no+indication+that+the+soviets+are+seeking+to+develop+a+strategic+nuclear+force+as+large+as+ours&source=bl&ots=DRsGN7k4t1&sig=ACfU3U1mxLKmm2GD6mHjrP_-pMoM1pL08A&hl=en&sa=X&ved=2ahUKEwibvqPe75LnAhUimeAKHUgpBm0Q6AEwCHoECAkQAQ#v=onepage&q=mcnamara%20%22there%20is%20no%20indication%20that%20the%20soviets%20are%20seeking%20to%20develop%20a%20strategic%20nuclear%20force%20as%20large%20as%20ours&f=false.

[118] *SALT II and the Growth of Mistrust* (Washington, D.C.: National Security Archive, 1995), p. 60, available at https://nsarchive2.gwu.edu/carterbrezhnev/C-B%20-%20SALT%20II%20-%20Musgrove%20master%20transcript.pdf.

> not be mutual suicide: the country better prepared for it and in possession of a superior strategy could win and emerge a viable society.[119]

Indeed, authoritative Soviet sources expressed the view that "There is profound erroneousness and harm in the disorienting claims of bourgeois ideologies that there will be no victor in a thermonuclear world war."[120] Moreover, as Pipes noted, "whereas we view nuclear weapons as a deterrent, the Russians see them as a 'compellent,'" stating, "There is something innately destabilizing in the very fact that we consider nuclear war unfeasible and suicidal for both, and our chief adversary views it as feasible and winnable for himself."[121]

Many U.S. policymakers initially were reluctant to ascribe such beliefs to Soviet leaders, perhaps because they conflicted so starkly with the action-reaction thesis and American policies underpinned by adherence to the U.S. notion of stable deterrence based on a balance of terror. Mutual societal vulnerability was thought to be a hallmark of strategic stability. As then-Secretary of Defense Robert McNamara noted in 1968, "Our ability to strike back and destroy Soviet society makes a Soviet decision to strike the U.S. highly unlikely…. Like us, to deter a first-strike nuclear attack, the Soviets maintain the ability to strike back and destroy our society."[122]

This approach to mutual deterrence and a corresponding assumption that the Soviet Union adhered to the same approach was a basis for McNamara's confidence in the action-reaction and inaction-inaction dynamics of interaction. As William Van Cleave explained Secretary McNamara's approach:

> If the US were to refrain from challenging a Soviet AD [assured destruction] capability, the Soviets would be satisfied and have no need to build up their forces further. Stability would result, and strategic arms limitation agreements codifying that stability could be reached. Hence, a policy of self-restraint was adopted and strategic force parity (later termed Sufficiency by the Nixon Administration) was substituted for the goal of Superiority.[123]

However, the Soviet missile buildup of the 1960s and 1970s moved well beyond McNamara's expectations based on a mutual balance of terror. As Fred Iklé, Under Secretary of Defense for Policy in the Reagan Administration, noted, "from the mid-1960s to the early 1970s, we misled ourselves by the mistaken forecast that the Soviet Union, in light of our self-restraint, would not

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[119] Richard Pipes, "Why the Soviet Union Thinks It Could Fight & Win A Nuclear War," *Commentary*, July 1977, available at https://www.commentarymagazine.com/articles/richard-pipes-2/why-the-soviet-union-thinks-it-could-fight-win-a-nuclear-war/.

[120] N.V. Karabanov in N.V. Karabanov, et al., *Filosofskoe nasledie V. I. Lenina i problemy sovremennoi voiny* (*The Philosophical Heritage of V.I. Lenin and the Problems of Contemporary War*) (Moscow, 1972), pp. 18-19, cited in Leon Gouré, Foy D. Kohler, and Mose L. Harvey, eds., *The Role of Nuclear Forces in Current Soviet Strategy* (Coral Gables, FL: Center for Advanced International Studies, University of Miami, 1974), p. 60.

[121] Pipes, op. cit.

[122] Robert S. McNamara, *Draft Memorandum for the President on Strategic Offensive and Defensive Forces*, January 15, 1968, p. 5, cited in Keith B. Payne, *The Great American Gamble: Deterrence Theory and Practice from the Cold War to the Twenty-First Century* (Fairfax, VA: National Institute Press, 2008), p. 98.

[123] Van Cleave, "The U.S. Strategic Triad," op. cit., p. 62.

want to overtake us in nuclear offensive forces, much less seek a capability for destroying most of our deterrent strength."[124]

The consequent U.S. homeland vulnerability to missile attack ultimately led to a U.S. policy revision, National Security Decision Memorandum (NSDM)-242—the 1974 "Schlesinger Doctrine." NSDM-242 called for the development of U.S. "limited nuclear options" (LNOs) designed to give a president alternatives to a large-scale nuclear response to a Soviet provocation.[125] Prior to that policy development, there was an official assumption that "the threat of large-scale nuclear retaliation provided the best deterrence,"[126] and according to Secretary Schlesinger all U.S. strategic targeting options involved "dumping literally thousands of weapons on the Soviet Union."[127] However, with the Schlesinger Doctrine, LNOs were considered critical because U.S. vulnerability to attack was thought to render less than fully credible a large-scale U.S. nuclear response to a limited Soviet attack, or a Soviet attack on U.S. allies, particularly in Europe.

Consequently, in the context of the continuing Soviet deployment of large numbers of ICBM warheads and the resultant unprecedented U.S. homeland vulnerability to Soviet nuclear missile attack, NSDM-242 called for LNOs to help preserve the credibility of U.S. extended nuclear deterrence commitments to allies and to provide the basis for "intra-war deterrence."[128] As noted, NSDM-242 called for graduated nuclear options and a "more flexible nuclear posture" that included planning for "a wide range of limited nuclear employment options" intended to "limit enemy capabilities to continue aggression" and deter escalation.[129] NSDM-242 eventually resulted in some enhancements to employment flexibility. For example, the "industrial and economic target base" was expanded "to include new targets judged to be critical for enemy postwar recovery" and the number of "military targets" was broadened "to include more of the targetable elements of Soviet and [Chinese] conventional forces."[130] To enable more flexible, counterforce options, the United States sought improvements in the Minuteman III ICBM force.[131]

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[124] Fred Charles Iklé, "Nuclear Strategy: Can There Be a Happy Ending?," *Foreign Affairs*, Vol. 63, No. 4 (Spring 1985), p. 813.

[125] See National Security Decision Memorandum-242, *Policy for Planning the Employment of Nuclear Weapons*, January 17, 1974, available at https://fas.org/irp/offdocs/nsdm-nixon/nsdm_242.pdf.

[126] *Current U.S. Strategic Targeting Doctrine*, December 3, 1979, available at https://nsarchive2.gwu.edu/NSAEBB/NSAEBB43/doc20.pdf.

[127] See, James Schlesinger's testimony in, U.S. Senate, Committee on Foreign Relations, *U.S.-U.S.S.R. Strategic Policies*, Hearings, 93rd Congress, 2nd Session, March 4, 1974 (Washington, D.C.: USGPO, 1974), p. 9, available at https://www.google.com/books/edition/U_S_U_S_S_R_Strategic_Policies/MHnQAAAAMAAJ?hl=en&gbpv=1&dq=us/ussr+strategic+policies+schlesinger+%22dumping+literally+thousands%22&pg=PA9&printsec=frontcover.

[128] Payne, *The Great American Gamble*, op. cit., p. 177.

[129] National Security Decision Memorandum-242, *Policy for Planning the Employment of Nuclear Weapons*, op. cit.

[130] Secretary of Defense, Memorandum for the President, *Summary of Findings: Analysis of Targets Pursuant to U.S. Nuclear Policy (NSDM-242),* January 28, 1975, pp. 1-2, available at https://www.archives.gov/files/declassification/iscap/pdf/2012-037-doc01.pdf.

[131] Secretary of Defense James R. Schlesinger, *Annual Defense Department Report FY 1975*, March 4, 1974, pp. 51-52, available at https://history.defense.gov/Portals/70/Documents/annual_reports/1975_DoD_AR.pdf?ver=2014-06-24-150705-323.

As Secretary of Defense James Schlesinger stated at the time:

> Since we ourselves find it difficult to believe that we would actually implement the threat of assured destruction in response to a limited attack on military targets that caused relatively few civilian casualties, there can be no certainty that, in a crisis, prospective opponents would be deterred from testing our resolve. Allied concern about the credibility of this particular threat has been evident for more than a decade. In any event, the actuality of such a response would be utter folly except where our own or allied cities were attacked…
>
> What we need is a series of measured responses to aggression which bear some relation to the provocation, have prospects of terminating hostilities before general nuclear war breaks out, and leave some possibility for restoring deterrence.[132]

The development of LNOs was not a rejection of deterrence but rather an effort to strengthen deterrence by providing the president with more credible response options. As one summary and analysis of the Schlesinger Doctrine concluded:

> Current U.S. nuclear planning guidance, while no less emphatic than its predecessors in stressing the primacy of deterrence, recognizes that deterrence can fail at many levels short of a massive Soviet first strike against the United States. In addition to the last-resort punitive retaliatory option, it seeks to provide means for using strategic forces in response to Soviet nuclear attacks on the United States against which the full-scale SIOP reprisal would be inappropriate, thereby enhancing deterrence and assuring that U.S. leaders would have alternatives other than inaction were those initiatives to occur.[133]

The key development driving the United States to incorporate LNOs into its planning was the continuing expansion of Soviet ICBM capabilities and the resultant U.S. need for the range of U.S. nuclear deterrent threat options that the Administration considered necessary for credible extended deterrence. In the context of limited Soviet nuclear use, U.S. LNOs would permit the demonstration of U.S. resolve for deterrence purposes without recourse to large-scale U.S. strike options that would increase the risk of an escalatory Soviet response that would lead to massive U.S. societal destruction. Given the likelihood of such U.S. societal destruction following any large-scale U.S. use of nuclear weapons, LNOs were considered necessary to provide *credible* threats to the Soviet Union in support of U.S. extended deterrence commitments. The European theatre presented an especially difficult challenge in this respect. Secretary McNamara's "flexible response" doctrine did not offer sufficient levels of selectivity and flexibility, apparently leaving the President only with large-scale nuclear response options. In the words of President Richard

[132] Ibid., pp. 37-38.

[133] Benjamin S. Lambeth, *Selective Nuclear Options in American and Soviet Strategic Policy*, Report R-2034-DDRE (Santa Monica, CA: RAND Corporation, December 1976), p. vi, available at https://www.rand.org/pubs/reports/R2034.html.

Nixon, "No president should be left with only one strategic course of action, particularly that of ordering the mass destruction of enemy civilians and facilities."[134]

Secretary Schlesinger's policy shift to include LNOs in U.S. planning was reflected in Nuclear Weapons Employment Policy-74 (NUWEP-74), which also emphasized improving command and control to support limited nuclear employment options.[135] Even critics of the "Schlesinger Doctrine" supported the emphasis on improving U.S. command and control.[136] NSDM-242 also called for "Regional Nuclear Options" (RNOs) that would support U.S. regional military operations in Europe and Northeast Asia but these options received relatively little attention within the government.[137]

Programmatically, the Department of Defense focused on Minuteman III upgrades, including more accurate MIRV warheads, improved airborne command and control systems, and more rapid retargeting capabilities.[138] Secretary Schlesinger wanted some increase in U.S. strategic counterforce capabilities,[139] but emphasized at the time that he was *not* seeking a U.S. force posture capable of "threatening the Soviet deterrent" through counterforce,[140] and that his policy shift did not require any additional U.S. nuclear capabilities.

Critics, following the action-reaction metaphor, contended that the new policy direction and related U.S. programs were going to "push the arms race further along the road" because they "must inevitably look to the Russians like an attempt to acquire a first-strike counterforce capability against their ICBM's."[141] It was argued the Russians would surely pursue "expensive programs" to "reduce their vulnerability."[142] Others suggested that the preferable course of action would be U.S. restraint, which would be reciprocated by Soviet restraint rather than a further increases in

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[134] *Public Papers of the Presidents of the United States: Richard Nixon* (Washington, D.C.: U.S. Government Printing Office, 1974), p. 307, available at https://books.google.com/books?id=ADn9hLQ0mYkC&pg=PA307&lpg=PA307&dq=%22no+president+should+be+left+with+only+one+strategic+course+of+action%22&source=bl&ots=U3xAvDSQ_F&sig=ACfU3U3mzFzxv2U7AEpJtmkQ2wCM56qG8Q&hl=en&sa=X&ved=2ahUKEwjs7obn2sbvAhUrFlkFHTUVBdMQ6AEwAnoECAMQAw#v=onepage&q=%22no%20president%20should%20be%20left%20with%20only%20one%20strategic%20course%20of%20action%22&f=false.

[135] Milton Leitenberg, "Presidential Directive (P. D.) 59: United States Nuclear Weapon Targeting Policy," *Journal of Peace Research*, Vol. 18, No. 4 (1981), p. 311. Also see, *Policy Guidance for the Employment of Nuclear Weapons*, April 3, 1974, available at https://nsarchive2.gwu.edu/NSAEBB/NSAEBB173/SIOP-25.pdf.

[136] Herbert Scoville, "Flexible Madness?," *Foreign Policy*, No. 14 (Spring 1974), p. 170, available at https://doi.org/10.2307/1147955.

[137] William E. Odom, "The Origins and Design of Presidential Decision-59: A Memoir," *Getting MAD: Nuclear Mutual Assured Destruction, Its Origins and Practice* (Carlisle, PA: Strategic Studies Institute, US Army War College, 2004), p. 177, available at JSTOR, www.jstor.org/stable/resrep12035.10.

[138] See Keith B. Payne, "The Schlesinger Shift: Return to Rationality," in Keith B. Payne, C. Johnston Conover, and Bruce William Bennett, *Nuclear Strategy: Flexibility and Stability*, Student Paper No. 82 (Santa Monica, CA: California Seminar on Arms Control and Foreign Policy, March 1979), pp. 14-16.

[139] Lynn Etheridge Davis, "Limited Nuclear Options: Deterrence and the New American Doctrine," *The Adelphi Papers*, Vol. 16, No. 121 (December 1, 1975), p. 21, available at https://doi.org/10.1080/05679327508448420.

[140] See James Schlesinger's testimony, March 4, 1974, op. cit., pp. 2, 21, 71; Schlesinger, Remarks, Overseas Writers Association Luncheon at the International Club, Washington, D.C. (January 10, 1974), p. 14; and Schlesinger, News Conference at the Pentagon (January 24, 1974), p. 2.

[141] Herbert Scoville, op. cit., p. 170.

[142] Ibid.

Soviet capabilities, i.e., inaction-inaction. Two such critics of the Schlesinger Doctrine called for "American self-restraint," suggesting, "To the extent that American activity might be an influential factor in Soviet weapons decisions, its role could probably be minimized if the United States adopted a policy of restraint in its pursuit of counterforce capability and undertook a concerted effort to project a conciliatory image."[143] Still others suggested the type of "counterforce improvements" called for in the Schlesinger Doctrine would undermine the prospects for arms control agreements and would "create strong pressures in the U.S.S.R. to expand old programs or to start new ones that either match or compensate for the U.S. programs."[144]

In reality, none of the dire effects predicted by critics of the Schlesinger Doctrine came to pass. The Soviets argued that U.S. policy on LNOs was "insensitive to the realities of nuclear war and rests on the dangerous misconception that strategic exchanges between the two superpowers' homelands can be subjected to firmly controlled orchestration in the intense heat of battle."[145] But despite U.S. development of selective nuclear employment options and the addition of modest counterforce capabilities to the Minuteman III ICBM, no apparent expansion of the arms race ensued.

Under the Schlesinger Doctrine, LNOs and a range of graduated response options became a U.S. priority as a means of enhancing the credibility of U.S. deterrent threats in the face of the continuing quantitative and qualitative improvements in Soviet ICBM capabilities and their implications for U.S. extended deterrence. In his 1975 testimony to the Senate Appropriations Committee Subcommittee on Defense, Secretary of Defense Schlesinger stated that the United States "should have some ability to destroy hard targets, even though we would prefer to see both sides avoid major counterforce capabilities. We do not propose, however, to concede to the Soviets a unilateral advantage in this realm. Accordingly, our programs will depend on how far the Soviets go in developing a counterforce capability of their own."[146]

However, while Soviet counterforce capabilities expanded significantly during this time period as Soviet ICBM accuracy improved and the numbers of heavily MIRVed ICBM warheads increased, U.S. hard-target counterforce capabilities declined. At least one interview participant noted that the average yield of U.S. nuclear weapons decreased as MIRVs with smaller yields were placed atop U.S. ICBMs, reducing the hard-target capability of the U.S. ICBM force.[147] Indeed, the United

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[143] Ted Greenwood and Michael L. Nacht, "The New Nuclear Debate: Sense or Nonsense?," *Foreign Affairs*, Vol. 52, No. 4, July 1974, pp. 774, 780.

[144] Barry Carter, "Nuclear Strategy and Nuclear Weapons," *Scientific American*, Vol. 230, No. 5, May 1974, p. 29.

[145] Quoted in Benjamin S. Lambeth, *Selective Nuclear Operations and Soviet Strategy*, Paper P-5506 (Santa Monica, CA: The RAND Corporation, September 1975), pp. 13-14, available at https://www.rand.org/pubs/papers/P5506.html#download.

[146] Testimony of Secretary of Defense James Schlesinger before the Senate Appropriations Committee, Subcommittee on Defense, February 12, 1975, p. 17, available at https://www.google.com/books/edition/Department_of_Defense_Appropriations/1JYtAAAAMAAJ?hl=en&gbpv=1&dq=should+have+some+ability+to+destroy+hard+targets,+even+though+we+would+prefer+to+see+both+sides+avoid+major+counterforce+capabilities&pg=PA17&printsec=frontcover.

[147] A previously classified Lawrence Livermore Laboratory analysis noted the Air Force's initial reluctance to move toward multiple warheads on ICBMs because of its "preference for large, rather than small warheads" and "perhaps a reluctance to rely on the complex and unproved mechanisms necessary to fulfill the yield/accuracy trade-offs." See Daniel Buchonnet, *MIRV: A Brief History of Minuteman and Multiple Reentry Vehicles*, February 1976, p. 47,

States deliberately restricted the capability of its MIRVs to avoid giving them a significant counterforce capability. As Dr. John Foster, then Director of Defense Research and Engineering noted, "Our own MIRV systems are not efficient against missile silos; they are designed for, and intended for use against defended urban/industrial type targets. They are not 'first strike' weapons."[148] Further, as Dr. Foster testified to Congress in 1970:

> …it is technologically feasible, in my opinion, for the United States to develop sufficient accuracy that with multiple vehicles sometime in the future we would be able to attack silos in the Soviet Union. However, we had a program of investigation along these lines and last year I canceled it. My purpose was to make it absolutely clear to the Congress and, hopefully to the Soviet Union, that it is not the policy of the United States to deny the Soviet Union their deterrent capability.[149]

The U.S. desire to avoid an action-reaction dynamic was also emphasized the following year by President Nixon, who stated:

> …because proliferating our offensive forces risks an increase in Soviet forces and a new phase in the arms race, we have not increased the numbers of our missiles and bombers. Instead, we have relied on alternatives such as hardening missile silos and deploying missile defenses. Our deployment of MIRVs serves the same purpose. They do not have the combination of numbers, accuracy and warhead yields to pose a threat to the Soviet land-based ICBM forces.[150]

This is an area where the United States, despite publicly acknowledging its intention to keep pace with Soviet counterforce capabilities, chose not to do so in deference to the concern that such capabilities would upset deterrence stability. In this case, Soviet actions preceded relative U.S. inaction that ultimately tipped the balance of hard target capability significantly in favor of the Soviet Union.

**Summary**

The U.S. 1974 policy shift, the Schlesinger Doctrine, called for the development of limited nuclear options. It clearly was motivated by the continuing increase in Soviet ICBMs and conventional force capabilities in Europe. As such, it appears to be an example of an action-reaction interaction, but the reverse of the action-reaction dynamic posited in public debate. The United

available at https://nsarchive2.gwu.edu/nsa/NC/mirv/mirv.html and https://nsarchive2.gwu.edu/nsa/NC/mirv/mirv1_53.html.

[148] Quoted in, Senate Committee on Foreign Relations, Subcommittee on Arms Control, International Law and Organization, *ABM, MIRV, SALT, and the Nuclear Arms Race*, Hearings, 91st Congress, 2nd Session (Washington, D.C.: USGPO, 1970), p. 53, cited in, Keith B. Payne, *The Great American Gamble*, op. cit., p. 172.

[149] Ibid., pp. 172-173.

[150] Richard M. Nixon, *Second Annual Report to the Congress on United States Foreign Policy*, February 25, 1971, pp. 311-312, available at https://books.google.com/books?id=6MDcAwAAQBAJ&pg=PA219&lpg=PA219&dq=nixon+state+of+the+world+feb+25,+1971&source=bl&ots=NPeS4x7Aus&sig=ACfU3U0Vx6aTyRyQWA8L_UkGjoEp_5Vyow&hl=en&sa=X&ved=2ahUKEwj9m4XLkcrpAhU2oHIEHaPaBT8Q6AEwCHoECAkQAQ#v=onepage&q=nixon%20state%20of%20the%20world%20feb%2025%2C%201971&f=false.

States was responding to Soviet nuclear and conventional force buildups that challenged the credibility of the U.S. extended deterrent and degraded the U.S. capacity to assure allies, particularly in NATO. As then-Secretary of Defense Donald Rumsfeld noted in 1977, "it should now be evident that the Soviets have taken the initiative in a wide range of programs, that restraint on our part (whatever its reason) has not been reciprocated—and is not likely to be…."[151]

This U.S. policy shift did not appear to drive any additional increase in the expansion in Soviet capabilities which was well underway, despite the predictable domestic criticism based on the assumed U.S.-led action-reaction dynamic. In addition, the buildup in Soviet strategic counterforce capabilities continued without a comparable U.S. response because doing so was contrary to the U.S. understanding of the requirements for deterrence stability—again an example quite the reverse of the typical U.S.-led action-reaction explanation of the arms race. The United States neither sought to mimic Soviet developments by attaining a significant counterforce advantage against Soviet hardened targets, nor did it develop a preemptive first-strike capability.

This particular interaction demonstrates well Colin Gray's point that a leadership's strategic culture shapes its armament choices in ways that cannot be explained by the reductionist action-reaction metaphor.[152] In this case, the U.S. goal of deterrence stability and conception of the requirements for stability led the United States to not respond to the continuing Soviet counterforce buildup despite the fact that the United States had the technical capability to do so. In short, the 1974 Schlesinger Doctrine is another inflection point that demonstrates that the action-reaction dynamic as employed in public debate to challenge U.S. policy and programmatic developments is contrary to historical evidence.

[151] Donald H. Rumsfeld, *Annual Defense Department Report FY 1978*, January 17, 1977, p. 62, available at https://history.defense.gov/Portals/70/Documents/annual_reports/1978_DoD_AR.pdf?ver=2014-06-24-150750-460.

[152] Colin S. Gray, *The Soviet-American Arms Race*, op. cit.

# Chapter V
# The Carter Administration's "Countervailing Strategy"

*"The Soviets have been increasing their nuclear force size rapidly in the last decade. They now have substantially more total yield than the United States and are reaching U.S. levels in numbers of nuclear warheads."*[153]

The relaxation of tensions that the United States expected following its *détente* policy with the Soviet Union did not materialize, as Soviet international behavior became more aggressive and Soviet military threats to the United States and NATO increased. This prompted the Carter Administration to reassess U.S. nuclear weapons policies and programs. As the Soviet nuclear buildup continued through the 1970s, the Soviet Union linked its growing nuclear capabilities to its self-expressed perception of greater freedom to intervene against Western interests and in support of "wars of national liberation" globally. As a consequence, the Soviet Union challenged Western interests on multiple fronts through the use of proxies in regional conflicts, including in Mozambique, Ethiopia, Angola, South Yemen, and through direct military intervention in Afghanistan in December 1979.

These interventions were a reflection of the Soviet Union's increasing military capability and ability to project power. As Georgy Shakhnazarov, a member of the International Department of the Central Committee of the Communist Party of the Soviet Union, remarked, "How was it [the situation in 1977-1979] different from the previous years? It was different because the Soviet Union entered that period at the peak of its military might. Never before did we have such a powerful military force. And it had to fire, it was seeking to find a use for itself."[154] The Soviet preoccupation with equality during the *détente* period is apparent from interviews with Soviet diplomats and government officials.[155] Soviet officials openly declared that they had achieved strategic nuclear parity with the United States and, therefore, the United States could no longer threaten escalation in response to Soviet regional actions, thus freeing the Soviet Union to become more active and confrontational globally.

At the time, the United States was judged to have a rough strategic equivalence with the Soviet Union; however, Zbigniew Brzezinski, President Carter's National Security Advisor, warned that this equivalence was "being threatened by the military competition in which the Soviets had, it appeared to us, greater latitude in the enhancement of their strategic forces than we did."[156] "The lack of transparency with respect to the Soviet strategic doctrine was a real problem for the United States," according to President Carter's Secretary of Defense Harold Brown.[157] Moscow

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[153] George Rathjens and Jack Ruina, "Nuclear Doctrine and Rationality," *Daedalus*, Vol. 110, No. 1 (Winter 1981), p. 180.

[154] Svetlana Savranskaya and David A. Welch, eds., *Global Competition and the Deterioration of U.S.-Soviet Relations, 1977-1980*, transcript from *The Carter-Brezhnev Project*, available at https://nsarchive2.gwu.edu/carterbrezhnev/ (Washington, D.C.: National Security Archive, 1995), p. 38, available at https://nsarchive2.gwu.edu/carterbrezhnev/docs_global_competition/part7.PDF.

[155] Ibid.

[156] *SALT II and the Growth of Mistrust*, op. cit., p. 119.

[157] *SALT II and the Growth of Mistrust*, op. cit., p. 20.

appeared determined to spread its ideology and influence in regional theaters and its doctrine linked its growing nuclear capabilities to its freedom to do so. U.S. policy makers faced the need to contain Soviet expansionism in the context of U.S. homeland vulnerability and a more aggressive Soviet Union worldwide and an increasing conventional force imbalance in Europe.[158]

In the late 1970s, the Central Intelligence Agency updated its capability estimate of Soviet SS-19 and SS-18 missiles, concluding that the missiles could potentially hold U.S. ICBMs at risk.[159] This caused considerable concerns within the Carter Administration. It provided an indication that the Soviet Union had begun to exceed U.S. capabilities in explosive power and number of ICBM warheads.[160] In other words, the Soviets did not appear to be content simply to trail U.S. strategic capabilities or to achieve strategic parity with the United States—an assumption that significantly influenced U.S. nuclear and missile defense posture since Secretary McNamara's years.

With respect to Soviet nuclear doctrine, the increasing deployment of Soviet strategic offensive and defensive capabilities suggested a clear effort on the part of Soviet leadership to attain exploitable strategic nuclear advantages over the United States. A 1976 "Team B" assessment of Soviet objectives concluded that "the USSR *strives for effective strategic superiority in all the branches of the military, nuclear forces included*" (emphasis in original).[161] This conclusion was a repudiation of the action-reaction and inaction-inaction metaphors that suggested the Soviet armament programs were a reaction to U.S. developments and that U.S. restraint would be matched by similar Soviet restraint. The belief that Soviet nuclear deployments, programs, and actions would slow down in response to U.S. restraint—the inaction-inaction thesis—was refuted by virtually all former senior U.S. officials who participated in this study's "oral history" interviews.

To begin grappling with the new challenging realities to national security and U.S. extended deterrence commitments, the Carter Administration in 1977 initiated a study to review "alternative military strategies" and to "construct alternative military force postures and programs to achieve them."[162] As Stansfield Turner, Director of the Central Intelligence Agency during the Carter Administration, noted, "There was an increasing effort to escape a situation where you had to think about very large global exchanges… The idea…was not to have a war-fighting capability so much as to avoid this awful binary choice: blowing up half the world, or doing nothing" in response to Soviet aggression.[163] The need for more strategic options, echoing NSDM-242, was reaffirmed in a May 1977 memorandum to Secretary of Defense Brown by Chairman of the Joint Chiefs of

[158] Leon Sloss, in R.L. Rinne, ed., *The History of NATO TNF Policy: The Role of Studies, Analysis and Exercises Conference Proceedings, Volume 1, Introduction and Summary* (Livermore, CA: Sandia National Laboratories, February 1994), p. 51, available at https://www.osti.gov/servlets/purl/10132869.

[159] *Global Competition and the Deterioration of U.S.-Soviet Relations, 1977-1980*, op. cit., pp. 165-166.

[160] Odom, "The Origins and Design of Presidential Decision-59: A Memoir," op. cit., p. 178.

[161] Report of Team "B," *Intelligence Community Experiment in Competitive Analysis, Soviet Strategic Objectives: An Alternative View*, December 1976, p. 6, available at https://www.cia.gov/library/readingroom/docs/LOC-HAK-545-28-1-5.pdf.

[162] *Presidential Review Memorandum-10* (Washington, D.C.: Office of the White House, February 18, 1977), available at https://www.jimmycarterlibrary.gov/assets/documents/memorandums/prm10.pdf.

[163] *Global Competition and the Deterioration of U.S.-Soviet Relations, 1977-1980*, op. cit., p. 227.

Staff Gen. George Brown, who recommended that the "current doctrine for the employment of nuclear weapons, as embodied in NSDM 242, should be retained."[164]

In response to Soviet moves, President Carter began to recognize that he would have to enhance the U.S. strategic position toward the end of his tenure and, according to Zbigniew Brzezinski, his decision to support the MX missile was made in this light.[165] The results of the Carter Administration's study in 1977 led to the July 1980 Presidential Directive (PD)-59, the "Countervailing Strategy." For the Carter Administration, ensuring stable deterrence was "perhaps the most important goal," according to Harold Brown.[166] Despite critics who argued that the United States would be starting another round of the arms race, the Carter Administration made a conscious choice to reduce and avoid "the inauguration of new weapons systems or strategies that could erode deterrence."[167] PD-59 "retained the principle of assured retaliation with a large preplanned strike in the event the United States was attacked, but it fundamentally altered the options for using nuclear weapons" in the event of a war in the European theater.[168]

Modifications to U.S. nuclear deterrence policy and nuclear force modernization plans were a direct consequence of enduring U.S. deterrence and extended deterrence goals and the expansion and advancement of Soviet nuclear weapons and delivery capabilities. As then-Secretary of Defense Harold Brown stated: "The unquestioned Soviet attainment of strategic parity has put the final nail in the coffin of what we long knew was dead – the notion that we could adequately deter the Soviets solely by threatening massive retaliation against their cities."[169] Ensuring the effectiveness of nuclear deterrence, including extended deterrence, was considered vital, as the United States increasingly worried about the Soviet conventional military advantage in Europe and its impact on U.S. allies.[170]

PD-59 was intended to continue the move, begun with NSDM-242, to increase the flexibility of U.S. nuclear employment planning and provide U.S. deterrence options specifically geared to the priorities and values of the Soviet leadership.[171] PD-59 recognized the possibility of a protracted nuclear exchange, potentially integrated with conventional operations. The document resulted in an extensive nuclear weapons modernization program that subsequently was sustained and expanded by the Reagan Administration.

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[164] Department of Defense, The Joint Chiefs of Staff, *Memorandum for the Secretary of Defense, Subject: Nuclear Weapons Employment Doctrine* (U), May 9, 1977, p. 8, available at https://www.esd.whs.mil/Portals/54/Documents/FOID/Reading%20Room/Other/99-A-0177_Nuclear_Weapons_Employment_Doctrine_9-May-1997.pdf.

[165] *SALT II and the Growth of Mistrust*, op. cit., p. 120.

[166] Ibid., p. 117.

[167] Ibid.

[168] Odom, "The Origins and Design of Presidential Decision-59: A Memoir," op. cit., p. 175. In the opinion of General Odom, the doctrine was "never fully implemented in force structure and doctrine."

[169] Harold Brown, *Department of Defense Annual Report Fiscal Year 1982*, January 19, 1981, p. 39, available at https://history.defense.gov/Portals/70/Documents/annual_reports/1982_DoD_AR.pdf?ver=2014-06-24-150904-113.

[170] *SALT II and the Growth of Mistrust*, op. cit., p. 23.

[171] Presidential Directive/NSC-59, *Nuclear Weapons Employment Policy*, July 25, 1980, available at https://fas.org/irp/offdocs/pd/pd59.pdf.

As Brzezinski noted in a memorandum to President Carter, PD-59 was "not designed to be a 'war fighting' doctrine, it takes into account Soviet employment doctrine because, with the Soviet acquisition of such large and accurate forces, that doctrine cannot be ignored if deterrence is to be maintained. To fail to make this change would be to risk drifting into a situation where our doctrine and capabilities could, in a crisis, deter ourselves more than the Soviets."[172] There can hardly be a clearer indication that the Carter Administration's Countervailing Strategy was not the cause of Soviet nuclear expansion, but a consequence of that expansion.

PD-59 was described as an "evolutionary refinement" of U.S. strategic policy.[173] It clearly was an extension of the policy direction initiated by NSDM-242. It acknowledged that the United States had entered "an era of strategic nuclear equivalence" with the Soviet Union and noted that for deterrence purposes the United States "must be capable of fighting successfully so that the adversary would not achieve his war aims and would suffer costs that are unacceptable, or in any event greater than his gains, from having initiated an attack."[174] This "Countervailing Strategy" focused on a comprehensive set of Soviet political-military targets to support a "denial of [Soviet] victory" deterrence strategy, including Soviet nuclear forces, storage sites, and command and control capabilities.[175] As described by former Deputy Under Secretary of Defense for Policy Planning Walter Slocombe:

> The strategy also helps to make clear that the United States would not be forced by a Soviet attack on our ICBMs to choose between surrender and a suicidal all-out attack on Soviet cities. Instead, the United States would be able to retaliate against a more limited set of Soviet targets, so as to deny the USSR any military advantage from its attack, while retaining a force in reserve capable of still further attacks on a broader set of targets, should the Soviets continue to escalate the conflict. The existence of such options and continuing efforts to improve American flexibility in this regard is the central message of the countervailing strategy.[176]

PD-59 reaffirmed the importance of U.S. strategic nuclear forces to extended deterrence, noting "Our strategic nuclear forces must be able to deter nuclear attacks not only on our own country but also on our forces overseas, as well as on our friends and allies, and to contribute to deterrence of non-nuclear attacks."[177] This approach was driven, in part, by the need to continue to assure U.S. allies in Europe that the United States would come to their defense in the case of a Soviet conventional (or combined nuclear) attack. As noted, the credibility of U.S. assurance was put in question by Soviet strategic force deployments that placed the U.S. homeland at risk of massive destruction in the event of an "assured destruction" U.S. response to a Soviet attack on Western Europe. The need to preserve the credibility of the U.S. extended deterrent to allies given U.S. vulnerability to a strategic nuclear response also helped move U.S. nuclear policy

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[172] Zbigniew Brzezinski, Memorandum to the President, *The Carter Transformation of Our Strategic Doctrine*, August 26, 1980, p. 3, available at https://www.archives.gov/files/declassification/iscap/pdf/2011-064-doc33.pdf.

[173] Walter Slocombe, "The Countervailing Strategy," *International Security*, Vol. 5, No. 4 (Spring 1981), p. 24.

[174] Ibid.

[175] See the discussion in, Colin S. Gray, *Nuclear Strategy and Strategic Planning* (Philadelphia, PA: Foreign Policy Research Institute, 1984), pp. 40-41.

[176] Slocombe, op. cit., p. 22.

[177] Ibid.

toward an emphasis on greater survivability and the enduring requirement for flexible strategic nuclear options.

To help implement this strategy, the United States planned to deploy a new highly-MIRVed "MX" ICBM in a mobile configuration to provide wider counterforce target coverage with greater survivability and to continue with accuracy and yield improvements to the Minuteman III ICBM. These were to be augmented by additional improvements to the sea-based and air-breathing legs of the strategic Triad, including deployment of air-launched cruise missiles (ALCMs), along with enhancements to strategic command and control and early warning systems. Further improvements in the accuracy of Soviet ICBMs, however, threatened the survivability of silo-based U.S. ICBMs and led to the examination of multiple U.S. MX deployment schemes intended to reduce its vulnerability to a surprise Soviet attack.[178] As a further indication of the invalidity of the inaction-inaction metaphor, Slocombe observed, "it is worth remembering…that the Soviets did not choose to reciprocate American restraint in the early 1970s in the development of high accuracy ICBMs."[179]

Continued increases in Soviet nuclear weapons capabilities, including hard target kill capabilities, were the genesis of concern over the "window of vulnerability." Existing Minuteman ICBMs in their silos, now increasingly vulnerable to a Soviet first strike, provided the only prompt hard target capability in the U.S. Triad. Without a survivable ICBM force, in the event of a limited Soviet counterforce first strike U.S. retaliatory options would be limited largely to soft targets, potentially inviting a "city-busting" response by the Soviet Union.

The way the United States reacted to the Soviet Union's attempts to attain a first-strike capability against U.S. ICBMs did not follow the action-reaction metaphor as popularly espoused: the United States was not the instigator in a drive to attain superiority over its adversary; nor did it respond by copying the Soviets' concurrent production of numerous missile types. The United States responded by seeking to ensure the survivability and efficacy of its nuclear deterrent without parroting Soviet actions. In other words, instead of increasing the number and capability of the U.S. ICBM force in ways that would match or exceed Soviet systems, the United States sought to make its land-based strategic deterrent more survivable by using hardening and dispersal techniques (e.g., consideration of multiple MX deployment schemes, including the "racetrack" approach, which would have shuttled a single MX missile among a configuration of 23 shelters in an attempt to conceal the missile's location from Soviet reconnaissance assets).

Despite the asymmetry in U.S. and Soviet hard target kill capability, the United States reduced the planned number of deployed MX missiles from 200 to 100, ultimately deploying only 50 MX missiles in the same (although somewhat modified) Minuteman silos that had become vulnerable to a Soviet first strike. U.S. actions in this instance hardly fit the public caricature of an action-reaction arms race. Nor did the U.S. deployment of the MX ICBM in fixed and vulnerable

[178] See for example, U.S. Congress, Office of Technology Assessment, *MX Missile Basing* (Washington, D.C.: USGPO, September 1981).

[179] Slocombe, op. cit., p. 26.

Minuteman silos track with the basic tenets of the Carter Administration's "countervailing strategy," which called for ensuring the "enduring survivability" of U.S. nuclear forces.[180]

PD-59 and the change it precipitated was a logical evolution of the U.S. approach to deterring the Soviet Union in light of the continuing expansion of Soviet strategic nuclear capabilities. Equally important was the stated linkage in PD-59 between procurement policy and nuclear employment policy. As PD-59 noted, "Our acquisition programs must be evaluated in terms of their support for the employment policy ordered by this directive."[181]

The criticism of the countervailing strategy shared many of the same arguments (usually made by the same people) leveled against the 1974 "Schlesinger Doctrine." For example, Spurgeon Keeney and Wolfgang Panofsky labeled the approach to deterrence stemming from PD-59 "Nuclear Utilization Target Selection" or "NUTS" for short.[182] They argued that, "the availability of increasing numbers of nuclear weapons in a variety of designs and delivery packages…inevitably encourages the illusion that somehow nuclear weapons can be applied in selected circumstances without unleashing a catastrophic series of consequences."[183] The critics argued that the approach "creates its own endless pressure for expanded nuclear stockpiles with increasing danger of accidents, accidental use, diversion to terrorists, etc."[184] In their view, the most problematic aspect of this approach was that it would "destabilize" mutual deterrence and drive the arms race. In practice, however, successive U.S. presidential administrations were aware of the inadequacies of relying exclusively on assured destruction and in one way or another tried to modify it, and the Soviet expansion of nuclear and conventional forces continued with remarkable continuity.[185]

In a plea for American self-restraint, one analyst argued, "It may even be true, as the so-called "Team B" appraisal of I976 concluded, that Moscow's buildup stems from patently aggressive designs. But it is not true, even if our 'worst-case' assumptions are correct, that American security is best served by acting in an equally provocative or more provocative manner."[186] As shown above, the United States was hardly acting in a provocative manner. It pursued its own set of comparatively modest and restrained nuclear weapons capabilities in response to Soviet deployments of ICBMs that threatened the U.S. homeland and shorter-range missiles that threatened U.S. allies in Europe. These U.S. programs were pursued not to support expanded U.S. goals, but to help ensure the continuing credibility of the U.S. nuclear deterrent and extended deterrent. This historical reality does not reflect the action-reaction critique of U.S. programs.

By the late 1970s, the fallacy of the action-reaction metaphor as employed in the public debate against U.S. nuclear weapons modernization was glaringly apparent. That did not, however,

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[180] Presidential Directive/NSC-59, *Nuclear Weapons Employment Policy*, op. cit., p. 2.

[181] Presidential Directive/NSC-59, *Nuclear Weapons Employment Policy*, op. cit., p. 4.

[182] Spurgeon M. Keeny and Wolfgang K. H. Panofsky, "Mad versus Nuts: Can Doctrine or Weaponry Remedy the Mutual Hostage Relationship of the Superpowers?," *Foreign Affairs*, Vol. 60, No. 2 (Winter 1981), p. 289, available at https://doi.org/10.2307/20041081.

[183] Ibid.

[184] Ibid.

[185] Slocombe, op. cit., p. 19.

[186] Ibid., p. 31.

prevent its continued repetition by critics of U.S. programs. Indeed, critics now continue to propagate the same argument more than forty years later. The discrepancy was explained away by some during the Cold War by arguing "that to some extent their [Soviet] strategic thinking has always lagged behind us," as Paul Warnke asserted.[187] Nevertheless, in contravention of the U.S.-led action-reaction arms race narrative, U.S. and Soviet actions reflected strongly divergent approaches to nuclear policy, nuclear weapons, and nuclear war that endured, and an absence of the action-reaction dynamic presumed by critics of PD-59.

**Summary**

The "Countervailing Strategy" was clearly a reaction to the continuing expansion of Soviet nuclear and conventional capabilities. This expansion demonstrated that the USSR's goal was not "parity" with the United States. Specifically, the Soviet development and deployment of large numbers of heavy ICBMs with high-yield, accurate, MIRVed warheads placed U.S. nuclear retaliatory capabilities at increasing risk. Yet, rather than responding symmetrically to Soviet developments by building and deploying comparable capabilities, the United States sought to adopt asymmetric measures, including silo hardening and dispersion to protect its retaliatory assets, though in the end it failed to disperse its ICBM force after multiple deployment schemes were considered and rejected.

The Soviet buildup of large counterforce capabilities clearly was not spurred by PD-59 or any other prior U.S. lead action, but rather by the Soviets' desire to attain a strategic advantage over the United States in the event of war and the associated coercive power to advance its foreign policy goals and global ambitions. In this instance, historical evidence demonstrates that the public narrative of a U.S.-led action-reaction arms race as articulated at the time was again wrong.

[187] Testimony of Paul C. Warnke, in U.S. Congress, Senate, Committee on Banking, Housing, and Urban Affairs, Civil Defense, Hearing on January 8, 1979 (Washington, D.C.: U.S. Government Printing Office, 1979), p. 15, quoted in, Donald W. Hanson, "Is Soviet Strategic Doctrine Superior?," *International Security*, Vol. 7, No. 3 (Winter 1982-1983), p. 62, available at https://doi.org/10.2307/2538551.

# Chapter VI
# The 1980s U.S. Nuclear Buildup

*"President Reagan…had the vision to see that the only way you were going to stop this was to be strong enough to convince them, they couldn't win. Not that we wanted to win, not that we wanted to fight, not that we wanted one more tank, or one more plane than they had. What we wanted was enough to demonstrate to them clearly they couldn't win and that was a major change of policy and it worked."*[188]

In the 1980s, the evidence mounted that U.S. and Soviet approaches to nuclear weapons were diametrically different. As a 1981 Department of Defense historical report noted:

> Though the United States and the Soviet Union both came to conceive of strategic forces as having the function of war prevention, their views concerning these forces continued to be different, the U.S. emphasizing manifestation of capability for inflicting unacceptable damage on an adversary's homeland, and the Soviets emphasizing manifestation of capability for fighting a war.[189]

This divergence of strategic goals resulted in different approaches to nuclear strategy and the development and procurement of different nuclear force capabilities by the United States and Soviet Union. It also affected how the United States and Soviet Union thought about strategic defensive capabilities. The reductionist action-reaction explanation of the arms race, predicated on the presumption of mutual adherence to the Western concept of a balance of terror, ignores how such asymmetries in strategic goals shape strategic force acquisition programs.

The Soviet Union's continued expansion of nuclear capabilities and aggressive geo-political designs provided the impetus that led to NSDM-242, PD-59, and subsequently to the Reagan Administration's endorsement and expansion of the Carter Administration's proposed nuclear modernization program. This was the last comprehensive strategic nuclear modernization effort carried out by the United States and resulted in the 1980s introduction of the new MX "Peacekeeper" ICBM; two new long-range bombers (the B-1 and B-2 "Stealth"); air-launched cruise missiles on the B-52; and additional upgraded and more accurate D-5 sea-launched ballistic missiles (SLBMs) and sea-launched cruise missiles.[190]

The Reagan Administration was concerned that the continued growth in Soviet nuclear and conventional force capabilities—in particular, the increase in Soviet ICBM warheads and improvements in their accuracy—called into question the credibility of U.S. deterrence strategy. This same factor drove NSDM-242 and PD-59 as described above. Rather than seeking a return to U.S. strategic superiority, the Reagan Administration's declared nuclear policy continued to

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[188] Interview with Caspar Weinberger, *Soldiers of God*, August 1997, available at https://nsarchive2.gwu.edu/coldwar/interviews/episode-20/weinberger3.html.

[189] Alfred Goldberg, et al., *History of the Strategic Arms Competition: 1945-1972*, Part 2, Historical Office, Office of the Secretary of Defense, March 1981, p. 819.

[190] Daryl G. Kimball, "Looking Back: The Nuclear Arms Control Legacy of Ronald Reagan," *Arms Control Today*, July 8, 2004, available at https://www.armscontrol.org/act/2004_07-08/Reagan.

emphasize deterrence and the need to possess "an adequate margin of safety with emphasis on enduring survivability."[191]

Growing concern, however, over the U.S. ability to preserve its deterrence capabilities—particularly ICBM survivability—in the context of the continuing improvement in Soviet strategic counterforce capabilities led to the creation of the "President's Commission on Strategic Forces" (the "Scowcroft Commission"), which was tasked with examining U.S. strategic force options. The Commission essentially reaffirmed the directions of NSDM-242 and PD-59 and concluded in 1983 that the Soviets "now probably possess the necessary combination of ICBM numbers, reliability, accuracy, and warhead yield to destroy almost all of the 1,047 U.S. ICBM silos, using only a portion of their ICBM force. The U.S. ICBM force now deployed cannot inflict similar damage."[192]

Consequently, to preserve U.S. deterrence strategies, the Commission recommended adapting U.S. nuclear force posture to the continuing expansion of Soviet strategic force capabilities. Its recommendations included the development of a small, single-warhead ICBM; the deployment of 100 MX missiles; and continued development of the more accurate D-5 SLBM. Not all of these programs survived,[193] but the emphasis on greater options and planning flexibility was a direct consequence of Soviet strategic force expansion and the more confrontational Soviet regional behavior that, according to Soviet policy statements, was enabled by that expansion.

The Scowcroft Commission report was a sobering indictment of the U.S. inability to keep pace with Soviet nuclear developments. Reagan's approach sought to close the "window of vulnerability" that had opened during the Carter Administration as a result of the massive Soviet investment in strategic offensive forces.

From NSDM-242 to PD-59 and the Scowcroft Commission, consistent U.S. deterrence goals and the continuing expansion of Soviet strategic nuclear and conventional forces led to major modifications in U.S. nuclear policy and corresponding developments in the U.S. force structure. This was no arms race driven by a U.S.-led action-reaction dynamic—although it was criticized as such at the time.[194] Indeed, Secretary of Defense Caspar Weinberger took issue with the term "arms race" in a speech he delivered to Western leaders in 1985, stating:

> It's flatly false I think to the extent that it suggests that we in the United States or in the West have been building weapons systems in quantities or varieties commensurate with the Soviet military buildup…. The Soviets…all during this decade of the 1970s and since,

[191] Caspar W. Weinberger, *Annual Report to the Congress, Fiscal Year 1983*, February 8, 1982, p. I-17, available at https://history.defense.gov/Portals/70/Documents/annual_reports/1983_DoD_AR.pdf?ver=2014-06-24-150929-423.

[192] *Report of the President's Commission on Strategic Forces*, April 1983, p. 4, available at http://web.mit.edu/chemistry/deutch/policy/1983-ReportPresCommStrategic.pdf.

[193] In fact, the small ICBM was never built, and the deployment of MX missiles was limited to 50, all emplaced in existing, stationary, and increasingly vulnerable silos.

[194] See for example, George Rathjens, "Flexible Response Options," *Orbis*, Vol. 28, No. 3 (Fall 1974), p. 685; and, Seymour Melman, "Limits of Military Power," *The New York Times*, October 17, 1980, p. A-31, available at https://globalmakeover.com/sites/economicreconstruction.com/static/SeymourMelman/archive/published/limits_of_military.pdf. Melman, in particular, asserted that "Our Government does not employ a single person with responsibility for thinking about reversing the arms race." He stated, "Jimmy Carter cynically pursues military superiority and 'limited' nuclear wars, and Ronald Reagan speaks for primitive nationalism and nostalgia for a replay of World War II."

> were developing and deploying new and expanded nuclear and conventional programs while we were rather passionately debating and passively delaying each new weapons proposal. We also made very substantial reductions in our arsenals of nuclear warheads at a time when they were expanding theirs.
>
> So I emphasize that term "arms race" is at the very least inappropriate. It clouds the distinction between the reasons why we arm and the reasons the Soviets arm. It doesn't focus on really the difference between arming for aggressive offensive military action and intimidation, and on the other hand, building defenses to protect the freedoms we have. It implies that our efforts to counter the military threats that we face are really as devoid of philosophical impulse and are empty of any broader significance than a sporting event. It is rather flip diminishment and deprecation of what I think has to be one of the noblest enterprises of man which is the defense of freedom.[195]

Walter Slocombe, Deputy Undersecretary of Defense for Policy Planning during the Carter Administration, succinctly stated the challenge with respect to U.S. strategic doctrine as follows: "because our strategic doctrine, like our strategic forces, is designed to deter the Soviets, not some group of Western analysts, it must take into account and assist in shaping Soviet perspectives."[196] He argued that Soviet military doctrine appeared to consider a possibility of a relatively prolonged exchange if a war comes, focused on targeting military forces rather than economic capacity in a nuclear exchange, prioritized the survival of its own regime and instruments of state power, and considered seriously victory as its goal in a nuclear war.[197] There was bipartisan agreement in the United States that in order to deter the Soviet Union, the United States had to threaten what the Soviets appeared to value most: political and military leadership and control, military forces, and the industrial economic capacity to sustain military operations.[198]

In a speech to the United Nations second special session on disarmament in 1982, President Reagan outlined the contrasting approaches of the United States and the Soviet Union with respect to military budgets and forces, stating:

> The decade of so-called detente witnessed the most massive Soviet buildup of military power in history. They increased their defense spending by 40 percent while American defense actually declined in the same real terms. Soviet aggression and support for violence around the world have eroded the confidence needed for arms negotiations.

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[195] Address by Caspar Weinberger to the International Democrat Union, "Peace Through Strength," July 25, 1985, printed in U.S. Department of State, *American Foreign Policy Current Documents 1985*, p. 61, available at https://books.google.com/books?id=xgbJEaY1SaAC&pg=PR12&lpg=PR12&dq=weinberger+current+documents+july+25,+1985&source=bl&ots=g-74UUYRsL&sig=ACfU3U1WlFzdH9JH0XfKlDKUpPOm4hMluA&hl=en&sa=X&ved=2ahUKEwiZnvHNgL7pAhX0lHIEHfZwAC0Q6AEwAXoECAkQAQ#v=onepage&q=weinberger%20current%20documents%20july%2025%2C%201985&f=false.

[196] Slocombe, op. cit., p. 19.

[197] Ibid., p. 20.

[198] Ibid., p. 23.

> While we exercised unilateral restraint, they forged ahead and today possess nuclear and conventional forces far in excess of an adequate deterrent capability.[199]

It was this continuing expansion of Soviet nuclear and conventional capabilities and continuing U.S. need for deterrence of the Soviet Union that led the Reagan Administration to adopt the comprehensive strategic nuclear modernization programs noted above. While the Reagan Administration's nuclear buildup was clearly a response to Russia's drive for military supremacy—a drive that corresponded to a more aggressive, expansionist, and anti-American Soviet foreign policy—U.S. nuclear modernization programs did not lead Soviet efforts and did not comport with the action-reaction arms race narrative espoused in public debate. The Reagan strategic nuclear buildup was restrained by comparison—arguably little more than a recapitalization of systems, some of which had been developed in the 1950s, deployed in the 1960s, and were in need of refurbishment and upgrade by the 1980s. As Richard Perle noted, by the start of the Reagan Administration in 1981, the U.S. strategic nuclear arsenal "was headed rapidly toward obsolescence."[200]

Nevertheless, critics of the Reagan Administration's nuclear weapons strategy employed the action-reaction arms race narrative to argue against the administration's plans and programs. Senators Edward Kennedy (D-MA) and Mark Hatfield (D-OR) argued that the Reagan Administration's nuclear programs place the world "at the starting line of a new round in the arms race, one that resurrects the specter of a first strike and that could shake the nuclear balance in unpredictable and uncontrollable ways."[201] W. Averell Harriman, former U.S. Ambassador to the Soviet Union, lamented "a nuclear arms race rapidly escaping out of control—and dangerously passing the point of no return," as "both the United States and the Soviet Union will have in place intercontinental missiles interpreted each by the other as instruments of a massive first strike" and "shorter-range nuclear missiles nearer each other's territory." As Harriman noted, "This is the grim result of Reagan Administration diplomacy: If present developments in nuclear arms and United States-Soviet relations are permitted to continue, we could face not the risk but the reality of nuclear war."[202]

The "Doomsday Clock"—a regular staple of the *Bulletin of Atomic Scientists* intended to visually capture the impending risk of nuclear war—moved from seven minutes to midnight to four minutes to midnight after the election of Ronald Reagan as president. Three years later, the clock advanced another minute closer to midnight, with a warning that "the arms race—a sort of dialogue between weapons—has intensified" and that little has been done "to impede the momentum of the arms race."[203]

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[199] Ronald Reagan, "Transcript of Reagan's U.S. Speech on the Nuclear Arms Race," *The New York Times*, June 18, 1982, available at https://www.nytimes.com/1982/06/18/world/transcript-of-reagan-s-un-speech-on-the-nuclear-arms-race.html.

[200] Telephone interview conducted on May 14, 2020.

[201] Edward M. Kennedy and Mark O. Hatfield, *Freeze! How You Can Help Prevent Nuclear War* (New York: Bantam Books, 1982), p. 102.

[202] W. Averell Harriman, "If the Reagan Pattern Continues, America May Face Nuclear War," *The New York Times*, January 1, 1984, available at https://www.nytimes.com/1984/01/01/opinion/if-the-reagan-pattern-continues-america-may-face-nuclear-war.html.

[203] "Three minutes to midnight," *Bulletin of the Atomic Scientists*, January 1984, p. 2, available at https://thebulletin.org/sites/default/files/1984%20Clock%20Statement.pdf.

Despite these criticisms, it is generally believed that the strategic modernization programs initiated by the Reagan Administration effectively deterred the Soviet Union and contributed to its willingness to negotiate and seek internal reform by demonstrating that the Soviet system could not effectively compete with the United States. Several former U.S. government officials interviewed for this study asserted that Reagan's nuclear modernization program helped end the Cold War. Rather than prompt an arms race, they contended that Reagan's approach provoked economic and political change in the USSR, helping to facilitate the dissolution of what Reagan had referred to as an "evil empire."

The Reagan Administration's response to the continuing expansion of Soviet strategic nuclear programs, and the same action-reaction oriented criticism of that response, played out at the theater nuclear level. Even before the Reagan Administration embarked on an effort to rebuild and modernize the U.S. strategic nuclear deterrent, the Soviet Union was expanding its non-strategic (also called "tactical" or "theater") nuclear forces arrayed against Western Europe. This included the ground-based SS-20 intermediate-range ballistic missile (IRBM), which replaced older Soviet SS-4 and SS-5 IRBMs. The Soviets hoped these deployments would create an exploitable schism and "decouple" the United States from its European NATO allies. According to some unclassified estimates, from 1980 to 1986 the number of MIRVed SS-20 deployments nearly tripled, from around 160 to more than 440.[204] Indeed, the increased deployments of Soviet SS-20s targeted against America's NATO European allies led to growing concern over the implications of an imbalance in theater nuclear forces in Europe and new questions about the credibility of U.S. extended nuclear deterrence guarantees.

NATO's "two track" decision in 1979 to deploy its own ground-based Intermediate-Range Nuclear Forces (INF) ballistic and cruise missile systems in Europe in response to the Soviet INF deployments, and simultaneously to seek to negotiate the elimination of such systems with the Soviet Union, placed the Reagan Administration in a position of simultaneously pursuing new theater nuclear deployments in NATO Europe and corresponding arms control negotiations.

To implement this policy and to counter the Soviet deployment of nuclear-armed IRBMs, especially the SS-20 IRBM, the Reagan Administration and allied European governments led a forceful and highly controversial, yet ultimately successful campaign to deploy countervailing ground-launched cruise missile (GLCM) and Pershing II intermediate-range nuclear systems in Europe. This was a watershed event that demonstrated alliance unity and solidarity in the face of Soviet nuclear threats and potential blackmail.

In 1981, the Reagan Administration proposed the "Zero Option" to the Soviets, which called for the total elimination of all U.S. and Soviet INF systems worldwide. This proposal was criticized by many in the arms control community as a non-starter and a "gimmick," with some arguing that its purpose was to help the administration "win important propaganda points in the new Cold

[204] See *The Military Balance 1980-1981* (London, UK: International Institute for Strategic Studies, 1981), p. 89 and *The Military Balance 1986-1987* (London, UK: International Institute for Strategic Studies, 1987), p. 204.

War."[205] Former Secretary of State and National Security Advisor Henry Kissinger argued that the Zero Option "contributes to decoupling the defense of Europe and the United States and eliminates one organic link of the Federal Republic of Germany to the nuclear defense of NATO. It will thus in the long run strengthen the forces of neutralism in Europe."[206] Unsurprisingly, the Soviets initially refused to negotiate away their advantage in these systems. At the same time, the United States—in response to a request by its NATO allies—proceeded with plans to deploy intermediate-range ground-launched cruise missiles (GLCMs) and Pershing II ballistic missiles in Europe.

NATO's plans to deploy INF missiles in Europe sparked vigorous public debate and protests on the continent, as well as in the United States. Employing the classic action-reaction arms race metaphor, one domestic critic argued that the missile deployments would trigger a Soviet reaction that would "provoke even more destabilizing actions by the United States."[207] Moreover, the argument was made that "If all cruise and Pershings are deployed, they surely will generate Soviet countermeasures, leading either to a breakdown in the INF talks and no agreement at all, or one which merely codifies the new systems on both sides."[208] Here again were the familiar action-reaction arguments that a U.S. move taken in response to prior Soviet nuclear arms deployments would be the cause of an arms race, and that the same U.S. response to a prior Soviet action would preclude an arms control agreement. These arguments followed the traditional pattern of ignoring the Soviet nuclear and conventional force expansion that motivated the U.S. response. Opponents were presented largely as benign cogs caught in an action-reaction dynamic driven by the United States. And again, as fits the historic pattern, the critics' predictions based on their action-reaction thinking did not come to pass.

Overseas, more than one million protesters turned out in West Germany on a single day in 1983 to voice their opposition to the planned INF deployments, with massive rallies and protests also taking place in other European capitals.[209] The Soviets actively encouraged and supported these protests movements in an effort to preclude NATO's INF deployment and split the alliance by suggesting the United States was seeking to make Western Europe a nuclear battlefield. The

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[205] Ken Booth, "The Myths, Threats and Promises of the Double-Zero Agreement," in, Ken Booth and John Baylis, *Britain, NATO and Nuclear Weapons: Alternative Defence versus Alliance Reform* (London: The MacMillan Press, Ltd., 1989), p. 31, available at https://books.google.com/books?id=q6WwCwAAQBAJ&pg=PA31&lpg=PA31&dq=zero+option+criticism&source=bl&ots=W1_2xxNZNT&sig=ACfU3U1o7o7YU6m2_OmZvOGe0jrOo7X20g&hl=en&sa=X&ved=2ahUKEwjw_OrwwtTpAhXnc98KHbtyCxsQ6AEwCHoECAkQAQ#v=onepage&q=zero%20option%20criticism&f=false.

[206] Henry Kissinger, "Forget the 'Zero Option'," *The Washington Post*, April 5, 1987, available at https://www.washingtonpost.com/archive/opinions/1987/04/05/forget-the-zero-option/1e59f88e-187f-40fb-b491-dd7166ea7853/.

[207] Jane M. O. Sharp, "Soviet response to cruise and Pershing," *Bulletin of the Atomic Scientists*, March 1984, p. 4, available at https://books.google.com/books?id=3gUAAAAAMBAJ&pg=PA3&lpg=PA3&dq=jane+sharp+soviet+response+to+pershing&source=bl&ots=zyfSYIrO-P&sig=ACfU3U3qYKAI2XfgJre2FfP2C0Xy6lLsJg&hl=en&sa=X&ved=2ahUKEwiD94ic_tTpAhXhmXIEHeOyDcwQ6AEwAnoECAgQAQ#v=onepage&q=jane%20sharp%20soviet%20response%20to%20pershing&f=false.

[208] Jane Sharp, "Euromissiles as bargaining chips? Think again!," *The Christian Science Monitor*, January 13, 1984, available at https://www.csmonitor.com/1984/0113/011313.html.

[209] William Drozdiak, "More Than a Million Protest Missiles in Western Europe," *The Washington Post*, October 23, 1983, available at https://www.washingtonpost.com/archive/politics/1983/10/23/more-than-a-million-protest-missiles-in-western-europe/9d703245-36fa-40ce-8714-e281f796a472/.

intelligence services of the Soviet Union's Eastern Europe satellite states reportedly played a significant role in the effort.[210] Soviet propaganda accused the United States of "scaring the public" about alleged Soviet advantages in European-based nuclear systems, arguing, "Although Washington has announced officially that the new missiles are intended for defending the West European countries, it actually intends to use them for 'preemptive' strikes at Soviet intercontinental ballistic missiles and other vital objectives in the Soviet Union's western areas, in other words, at strategic targets." In addition, the Soviets asserted, "The main intention underlying the U.S. wish to site its medium-range nuclear weapons systems in a number of European NATO countries is not to ensure European security but rather to soften the impact of a retaliatory strike against the USA, if it attacks the Soviet Union."[211] The fact that the United States was willing, even eager, to negotiate the elimination of all such U.S. and Soviet INF capabilities belies this charge.

Despite intense domestic and foreign pressure put on Western governments, NATO solidarity remained unbroken and the United States began the deployment of 108 Pershing II ballistic missiles and 464 GLCMs in 1983. It was only after the United States deployed its own INF systems in Europe that the Soviet Union agreed to negotiate seriously for their removal, along with the SS-4s, SS-5s, and SS-20s that prompted NATO's countervailing deployments in the first place. The alliance's steadfastness in light of extensive Soviet pressure convinced the Soviets to adopt the "Zero Option," which later became the Intermediate-Range Nuclear Forces (INF) Treaty. The INF Treaty was signed by Presidents Reagan and Gorbachev in December 1987.

Contrary to the assertions of those who criticized U.S. INF deployments in Europe as a dangerous and destabilizing harbinger of yet another U.S.-led spiral in the arms race, the deployment of the Pershing II and GLCM actually led to the first arms control agreement that eliminated an entire class of nuclear systems. In retrospect, it is highly unlikely this outcome would have been possible had Soviet INF deployments remained unchallenged. Policy suggestions based on the usual action-reaction critique of U.S. policy and programs proved again to be wholly contrary to the historical evidence.

**Summary**

The nuclear build-up of the 1980s demonstrates again the fallacies of the action-reaction arms race narrative. At the strategic level, the United States was guided by mounting concerns over a growing Soviet nuclear advantage, especially the growth in Soviet counterforce capabilities realized by the quantitative and qualitative expansion of large, heavily-MIRVed ICBM capabilities. The U.S. response was not the lead action in an action-reaction dynamic nor did it mirror Soviet actions. Rather than seeking to increase the size and counterforce capability of the U.S. ICBM force, the United States sought to ensure the survivability of its retaliatory deterrent. This included the hardening of existing ICBM silos and the deployment of a new ICBM, the MX "Peacekeeper," initially intended to be in a mobile configuration to enhance its survivability. In fact, the MX ICBM

[210] For a discussion of the role of the Czech intelligence services, see Vladimír Černý and Petr Suchý, "Spies and Peaceniks: Czechoslovak Intelligence Attempts to Thwart NATO's Dual-Track Decision," National Institute for Public Policy, *Information Series*, Issue No. 456, April 8, 2020, available at https://www.nipp.org/2020/04/08/cerny-vladimir-and-petr-suchy-spies-and-peaceniks-czechoslovak-intelligence-attempts-to-thwart-natos-dual-track-decision/.

[211] *Whence the Threat to Peace*, 3rd ed. (Moscow: Military Publishing House, 1984), pp. 72-73.

was deployed in significantly fewer numbers than originally proposed and placed in the same stationary (and vulnerable) silos that housed the Minuteman ICBM force.

In addition, emphasis was placed on improving the accuracy and survivability of the other legs of the strategic nuclear Triad in order to bolster deterrence and ensure the credibility of U.S. extended nuclear guarantees to allies. In this regard, U.S. actions were motivated by concerns over the degradation of U.S. deterrence and extended deterrence caused by the Soviet drive for nuclear superiority rather than by any desire to engage the Soviet Union in an arms race.

With respect to non-strategic nuclear systems, Soviet actions—particularly in deploying the SS-20 IRBM in Europe—led to a countervailing response by the United States and NATO, i.e., deployment of Pershing IIs and GLCMs in Europe and the initiation of a theater nuclear arms control track. Here again, the typical action-reaction arms race narrative espoused domestically and abroad at the time proved false, as U.S. counter-deployments were a responsive move and resulted not in an arms *buildup* or *arms race*, but in an *arms control* treaty that, for the first time in history, eliminated an entire class of nuclear armaments. The INF Treaty was hailed, even by critics of the Reagan Administration's nuclear policies, as a watershed event and a positive development in not only halting, but in reversing a potential arms race.

# Chapter VII
# The Strategic Defense Initiative (SDI)

*What if free people could live secure in the knowledge that their security did not rest upon the threat of instant U.S. retaliation to deter a Soviet attack, that we could intercept and destroy strategic ballistic missiles before they reached our own soil or that of our allies?*[212]

On March 23, 1983, after more than a decade of strict adherence to the 1972 Anti-Ballistic Missile (ABM) Treaty, President Ronald Reagan announced a potentially major shift in U.S. strategic policy. The ABM Treaty prohibited an effective nationwide defense against strategic ballistic missile attack, codified the "balance of terror" thought to be essential for deterrence to function reliably, and reflected the prevailing belief that strategic missile defenses were technologically infeasible, cost ineffective, destabilizing, and the cause of strategic arms racing. The ABM Treaty was seen by its supporters as a way of preventing an action-reaction arms race by eliminating the need for the Soviets to build up their strategic offensive nuclear forces.

In his address to the nation, President Reagan declared that "what it takes to maintain deterrence has changed." He noted, "For 20 years the Soviet Union has been accumulating enormous military might. They didn't stop when their forces exceeded all requirements of a legitimate defensive capability. And they haven't stopped now." Consequently, Reagan cited "the necessity to break out of a future that relies solely on offensive retaliation for our security" and proposed "a program to counter the awesome Soviet missile threat with measures that are defensive" by rendering nuclear weapons "impotent and obsolete."[213] The result was the Strategic Defense Initiative (SDI) program.

The rudimentary Sentinel and Safeguard missile defense programs in the 1960s and 1970s had been abandoned as the philosophy of mutual deterrence via a mutual "hostage" relationship between the United States and Soviet Union came to dominate policy. SDI was a major inflection point in U.S. nuclear policy that sought to reverse decades of this thinking about how best to address the threat of Soviet nuclear attack. The SDI reflected an expressed desire to move away from the dominant balance of terror paradigm (and concomitant belief in the stabilizing benefit of mutual vulnerability) as the means of protecting against nuclear attack. There was a moral dimension as well, reflected in President Reagan's view that it would be "better to save lives than avenge them."[214] In addition, SDI was considered a potential way to nullify the Soviet Union's investment and competitive advantage in offensive missile capabilities through the deployment of an asymmetric missile defense capability.

Although SDI was a research and development program to be carried out, as Reagan noted, "consistent with our obligations of the ABM treaty," critics accused the Administration of opening

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[212] President Ronald W. Reagan, *Address to the Nation on Defense and National Security*, March 23, 1983, available at http://www.atomicarchive.com/Docs/Missile/Starwars.shtml.

[213] Ibid.

[214] Ibid.

the doors to a resumption of the arms race. The argument that SDI would spark an action-reaction arms race was identical to the action-reaction and corresponding inaction-inaction narratives prevalent during the earlier ABM debate in the 1960s and 1970s—a narrative which proved to be false.

Consistent with the action-reaction paradigm, Strobe Talbott, a journalist who later became Deputy Secretary of State, stated that missile defenses would lead to "unceasing competition without stability."[215] Reagan's response was to suggest that the defensive technology developed under SDI could be shared with the Soviets "to prove to them that there was no longer any need for keeping these missiles."[216] Nevertheless, domestic critics of SDI insisted it would undermine arms control and intensify an arms race.

Then-Sen. John Kerry (D-MA) stated, "you cannot have SDI and arms control at the same time."[217] Several other analysts noted, "In short, SDI will surely complicate efforts at arms control and stimulate an intensified arms race."[218] Reflecting both the action-reaction and inaction-inaction metaphors, others insisted that "…it is possible to reach good agreements, or possible to insist on the [SDI] program as it stands, but wholly impossible to do both."[219] As the Union of Concerned Scientists reported, by June 1986, some 6,500 professors and graduate students in the physical sciences and engineering departments of major U.S. universities had signed a pledge not to participate in SDI work, declaring that missile defenses "will only serve to escalate the nuclear arms race by encouraging the development of both additional offensive overkill and an all-out competition in anti-ballistic-missile weapons."[220]

Other critics of SDI argued that the Soviets "would certainly develop counter measures, increase their offensive capacity, and so on."[221] One critique stated that "by deploying defensive systems or by increasing their capability to destroy the opponent's forces first, will almost certainly be futile, because these efforts will lead to more nuclear offensive arms for both and may add to the danger of a nuclear holocaust."[222] Some suggested the program would instigate "an expensive arms

[215] Cited in Mark W. Davis, "Reagan's Real Reason for SDI," *Policy Review* (Palo Alto, CA: The Hoover Institution, October 1, 2000), available at https://www.hoover.org/research/reagans-real-reason-sdi.

[216] Atomic Heritage Foundation, *Strategic Defense Initiative (SDI)*, July 18, 2018, available at https://www.atomicheritage.org/history/strategic-defense-initiative-sdi.

[217] W. Bruce Weinrod, "Strategic Defense: Implications for Arms Negotiations," The Heritage Foundation *Backgrounder*, October 16, 1985, available at http://s3.amazonaws.com/thf_media/1985/pdf/bg463.pdf.

[218] Jerome Slater and David Goldfischer, "Can SDI Provide a Defense?," *Political Science Quarterly*, Vol. 101, No. 5, 1986, p. 842.

[219] McGeorge Bundy, George F. Kennan, Robert S. McNamara, and Gerard Smith, "The President's Choice: Star Wars or Arms Control," *Foreign Affairs*, Vol. 63, No. 2, Winter 1984/85, pp. 273, 277, available at https://www.foreignaffairs.com/articles/1984-12-01/arms-control-presidents-choice-star-wars-or-arms-control.

[220] William Sweet, "Scientists shoot down Star Wars," *Bulletin of the Atomic Scientists*, July/August 1987, p. 7, cited in, Matthew Lippman, "The Strategic Defense Initiative and the Militarization of Space: Scientific Responsibility and Citizen Resistance," *Penn State International Law Review*, Volume 9, Number 2, 1991, available at https://elibrary.law.psu.edu/cgi/viewcontent.cgi?article=1136&context=psilr.

[221] Charles Krauthammer, "The Illusion of Star Wars," *The New Republic*, May 14, 1984, p. 16, cited in, Keith B. Payne, *Strategic Defense: "Star Wars" in Perspective* (Lanham, MD: Hamilton Press, 1986), p. 100.

[222] Rathjens and Ruina, op. cit., p. 181.

race" that could "bankrupt not only the Soviet, but the U.S. economy as well."[223] Moreover, they argued, SDI would be "carrying the arms race into space."[224] Amb. Averell Harriman argued that "the arms race is about to be launched into space" and that SDI "will mean that both sides will accumulate thousands more offensive weapons to overcome whatever defenses they each might devise."[225] As several other critics noted, "If the U.S. decides to field space-based interceptors…[it] could provide a rationale for other actors to exploit this domain, creating an arms-race dynamic among major space powers."[226] Embellishing on this theme, Senator Edward Kennedy (D-MA) derisively referred to SDI as "Star Wars."[227]

As expected, the Soviets also were highly critical of SDI, arguing that its "only objective" is "to secure the capability to deliver a first nuclear strike against the USSR with impunity." They also echoed the criticisms of SDI's domestic opponents by contending that the program "would clearly jeopardize the prospects of limiting and reducing strategic offensive armaments," and that its realization "would only undermine the ABM Treaty and lead to an all out arms race whose scope and dangerous consequences are so far impossible even to predict."[228] The Soviet General Secretary, Mikhail Gorbachev, declared, "If the U.S. builds up SDI... strategic stability will be undermined and a new sphere will be opened up in the arms race with unpredictable consequences."[229]

Despite the propagandistic nature of Soviet statements against SDI, a number of "oral history" participants stated that the Soviets took SDI seriously. For example, William Graham, Director of the White House Office of Science and Technology Policy in the Reagan Administration and a member of the President's Arms Control Experts Group that met with the Soviets at the 1987 and 1988 summits, commented that it was the "only thing that got the Soviets' serious attention."[230] Others noted that the SDI program fueled a Soviet perception that the United States enjoyed a greater level of technological sophistication in missile defense technologies and that the Soviet Union was faced with the challenge of competing from a position of technological inferiority.

The narrative of the SDI critics was a perfect example of how U.S. policy was portrayed as *initiating* a new spiral in the arms race, i.e., U.S. *action* would lead to a Soviet *reaction* and thereby cause an arms race. The U.S. approach to defensive measures that could protect the American people against a ballistic missile attack was considered both destabilizing and dangerous; it was

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[223] Dietrich Fischer, "Strategic Defense Initiative as a Cause of Crisis Instability," *Journal of Legislation*, Vol. 15, Issue 2, Article 8 (1989), p. 148, available at http://scholarship.law.nd.edu/jleg/vol15/iss2/8.

[224] Ibid., p. 149.

[225] Harriman, op. cit.

[226] Michael Elleman and Gentoku Toyoma, "Will space-based missile interceptors weaponise space?," International Institute for Strategic Studies, December 20, 2018, available at https://www.iiss.org/blogs/analysis/2018/12/missile-interceptors-weaponise-space.

[227] "'Star Wars': How the Term Arose," *The New York Times*, September 25, 1985, available at https://www.nytimes.com/1985/09/25/world/star-wars-how-the-term-arose.html.

[228] *Whence the Threat to Peace*, op. cit., pp. 40-41.

[229] Cited in Howard G. DeWolf, *SDI and Arms Control*, Institute for National Strategic Studies, National Defense University, 1989, p. 27, available at https://apps.dtic.mil/dtic/tr/fulltext/u2/a271576.pdf.

[230] Telephone interview conducted on April 24, 2020.

argued it would lead to a "militarization of the heavens,"[231] an increase in offensive nuclear arms, a competition in strategic defensive measures, and ultimately bankrupt the economy. Employing the classic action-reaction metaphor, several SDI opponents argued that the program would "trigger a major expansion of the arms race,"[232] noting:

> The most likely Russian response to a U.S. decision to pursue the president's Strategic Defense Initiative should be expected to rely on traditional military "worst case" analysis…. In this instance the Russians will surely overestimate the effectiveness of the U.S. ballistic-missile defense and arm accordingly…. A compensating U.S. buildup in offensive missiles would then be inevitable…[that] would guarantee an accelerated offensive arms race.[233]

This narrative, however, generally ignored the reality of Soviet strategic developments that *preceded* the SDI program, including a massive Soviet buildup of offensive counterforce capabilities (despite the ABM Treaty's prohibition on strategic missile defenses) and a substantial Soviet investment in and deployment of its own strategic defensive systems, including the world's only ABM system, a massive network of early warning radars and air defenses to provide extensive defensive coverage for the country, and extensive civil defense preparations. Soviet strategic nuclear warheads reportedly expanded from roughly 2,000 in 1972 to approximately 12,000 by 1990—a six-fold increase in the nearly two decades since the ABM Treaty entered into force.[234] Moreover, the Soviets began to upgrade their own ABM system beginning in 1980, three years before President Reagan announced the SDI program.[235] Yet again, the action-reaction metaphor, as employed, treated the Soviet Union as a benign cog caught in a mechanistic U.S.-led arms race dynamic.

In 1986, then-Secretary of Defense Caspar Weinberger noted, "Not only are the Soviets ahead of us today in the development and deployment of strategic defenses, but they have invested so much more on these technologies and in so many different areas…."[236] "Since the ABM treaty of 1972," he noted, "the Soviet Union has spent at least as much on strategic defenses as on its extraordinary strategic nuclear offensive buildup."[237]

Whereas SDI was a *response* to the continuing Soviet offensive and defensive buildup of the 1970s, and an attempt to move beyond the traditional offense-dominant approach to deterrence where the Soviet Union enjoyed a growing advantage, critics portrayed it as the *initiator* of an action-reaction cycle of the arms race. As a familiar corollary to this narrative, critics contended that if the United States abandoned its attempt to defend against incoming ballistic missiles and

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[231] See for example, Jay Nordlinger, "SDI at 30, Part II," *National Review*, March 23, 2013, available at https://www.nationalreview.com/2013/03/sdi-30-part-ii-jay-nordlinger/.

[232] Hans A. Bethe, Richard L. Garwin, Kurt Gottfried and Henry W. Kendall, "Space-based Ballistic-Missile Defense," *Scientific American*, Vol. 251, No. 4 (October 1984), p. 39.

[233] Ibid., p. 48.

[234] Baker Spring, "Myths About Missile Defense and the Arms Race," The Heritage Foundation, July 13, 2000, available at https://www.heritage.org/defense/report/myths-about-missile-defense-and-the-arms-race.

[235] Keith B. Payne, *Strategic Defense: "Star Wars" in Perspective* (Lanham, MD: Hamilton Press, 1986), p. 53.

[236] Caspar W. Weinberger, *Annual Report to the Congress, Fiscal Year 1987*, February 5, 1986, p. 76, available at https://history.defense.gov/Portals/70/Documents/annual_reports/1987_DOD_AR.pdf?ver=2016-02-25-102420-833.

[237] Ibid., p. 75.

remained in strict compliance with the ABM Treaty, the Soviet Union would have no reason or incentive to further grow its own strategic nuclear offensive capabilities or pursue strategic missile defense. This inaction-inaction paradigm was reminiscent of the arguments employed by ABM Treaty supporters in the 1960s and 1970s that proved to be erroneous. Nevertheless, as one analysis explained, "The underlying assumption was that limitations of ABMs would leave both superpowers unambiguously hostage to each other, would institutionalize MAD, and would thus eliminate the forces driving the offensive arms race."[238] In retrospect, these assumptions proved invalid.

Despite the Reagan Administration's desire to research and develop advanced technologies for missile defense, disputes over the legal interpretation of the ABM Treaty and its applicability to the SDI program, including strong congressional opposition, led to a massive scaling back of the Administration's plans. Much of the opposition was based on a belief that SDI would upset the traditional "balance of terror" approach to deterrence. Indeed, the SDI was disdained by those in and out of government persuaded that strategic defenses were destabilizing and that an offense-dominant posture that threatened mutual societal destruction on a massive scale was the best way to ensure the efficacy of deterrence.

The expansive defensive goal of the SDI was never realized. The program was reduced in scope and magnitude to one that was fully compliant with a strict interpretation of the ABM Treaty and entailed no deployment of capabilities throughout the Cold War. Following the end of the Cold War, the proliferation of advanced military technology presented a new strategic threat to the United States and U.S. defensive goals shifted considerably. In 1991, the Global Protection Against Limited Strikes (GPALS) program was intended to provide protection, as the name suggests, against limited and accidental strikes, whatever the source; though it, too, would have been prohibited by the ABM Treaty.[239]

Yet, although SDI never came to fruition, the Soviet Union continued to expand its strategic nuclear forces both quantitatively and qualitatively, heavily MIRVing their large, counterforce capable ICBMs, proceeding with the development and deployment of newer, more sophisticated ballistic missiles and delivery vehicles, and improving their overall strategic defenses. By 1987, the Department of Defense (DoD) had concluded that, "Soviet production of newer, more lethal strategic nuclear weapons continues," underscoring the Soviet Union's "commitment to modernizing its large nuclear arsenal."[240] Moreover, DoD noted that the Soviet Union's "ABM strategic defense system has been continually improved over the past 2 decades."[241]

Clearly, neither the assumption that SDI would initiate another spiral in the U.S.-Soviet arms race, nor the contention that abandoning SDI would remove the Soviet Union's incentive to expand its

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[238] Slater and Goldfischer, op. cit., p. 853.

[239] See for example, Office of the Assistant Secretary of Defense (Public Affairs), "New Strategic Defense Initiative Program focus: Global Protection Against Limited Strikes (GPALS)," *News Release*, No. 54-91, 30 January 1991. Also see, Strategic Defense Initiative Organization, *The President's New Focus for SDI: Global Protection Against Limited Strikes (GPALS)*, June 6, 1991, available at https://apps.dtic.mil/dtic/tr/fulltext/u2/a338966.pdf.

[240] U.S. Department of Defense, *Soviet Military Power 1987*, March 1987, p. 23, available at https://fas.org/irp/dia/product/smp_87_ch2.htm.

[241] Ibid., p. 45, available at https://fas.org/irp/dia/product/smp_87_ch3.htm.

own strategic offensive and defensive capabilities were validated by history. The Soviet Union continued to expand its offensive and defensive capabilities before the SDI was announced and similarly after the SDI was reduced to a development program only in continuing strict compliance with the ABM Treaty. The narrative proffered by SDI critics—namely, the familiar action-reaction and corollary inaction-inaction contentions—is not supported by this history.

As one analysis noted:

> It is now clear that the notion that the arms race was primarily a function of an action-reaction cycle between offense and defense underestimated other potent forces driving that race—the underlying Soviet-American ideological and political conflicts; the implementation of particular military strategies, like counterforce or damage-limitation; worst-case reasoning in both superpower defense establishments; the inexorable march of technology; the impact of domestic politics, interservice rivalries, and bureaucratic competition; and the desire for negotiating advantages or bargaining chips in arms controls talks themselves.[242]

Indeed, the fallacy of the notion that U.S.-Soviet military developments in the 1980s were governed by an action-reaction dynamic has even been suggested by some critics of U.S. nuclear modernization and missile defense. As one critic recently commented, "Soviet arms spending grew at a steady pace during the Cold War and did not rise or fall in response to American expenditures…. The Reagan arms buildup and the announcement of the Strategic Defense Initiative did not cause a major increase in Soviet military spending."[243]

Following the end of the Cold War, the U.S. programmatic approach to missile defense continued to shift, culminating in the U.S. withdrawal from the ABM Treaty in 2002. As will be noted in a subsequent chapter, this paved the way for an initial deployment of missile defense interceptors by 2004 that would provide a measure of protection against limited strategic missile threats such as that posed by North Korea and potentially Iran, and reflected a belief that familiar Cold War deterrence strategies may not be effective against rogue states in the post-Cold War world.[244] The United States and allied countries also cooperated extensively to provide protection against theater missile threats.

**Summary**

SDI was a major inflection point in U.S. policy that sought to reverse nearly two decades of U.S. adherence to mutual deterrence based on a "balance of terror." The SDI program was a reaction to continuing improvements in Soviet strategic offensive and defense capabilities. The SDI example clearly demonstrates an interaction between the United States and Soviet Union in the area of strategic armaments but is inconsistent with the type of action-reaction paradigm that

[242] Slater and Goldfischer, op. cit., pp. 853-854.

[243] David Cortright, "The Trump administration thinks it can win an arms race. Time for a history lesson," *Bulletin of the Atomic Scientists*, June 5, 2020, available at https://thebulletin.org/2020/06/the-trump-administration-thinks-it-can-win-an-arms-race-time-for-a-history-lesson/.

[244] See, President George W. Bush, *Text of President Bush's Speech at the National Defense University*, May 1, 2002, *The New York Times on the Web*, Associated Press, available at http://www.nytimes.com/aponline/national/01WIRE-BUSH-TEXT.html?pagewanted+print.

opponents of SDI publicly charged. It is also inconsistent with the inaction-inaction narrative that suggested the Soviets would refrain from adding to their strategic offensive nuclear arsenal if SDI were halted. If anything, Soviet offensive and defensive programs not only continued apace but accelerated after the comprehensive approach to SDI that the Reagan Administration initially sought to pursue was abandoned.

SDI demonstrated the fallacy of the action-reaction arms race narrative. It was an asymmetric *defensive* response to the buildup of Soviet offensive capabilities and its failure to be realized as originally envisioned neither halted nor curbed Soviet enthusiasm for improving their own strategic offensive and defensive capabilities.

What SDI was a catalyst for was a Soviet belief that they were unable to compete with the United States in this area and that any such competition had the potential to cause great economic harm to the Soviet Union. When coupled with the Reagan Administration's nuclear buildup in the 1980s, SDI proved a powerful impetus toward reform of the Soviet political system and the ultimate demise of the Soviet Union.

# Chapter VIII
# The Demise of the ABM Treaty and the Decision to Deploy a National Missile Defense System

*"To maintain peace, to protect our own citizens and our own allies and friends, we must seek security based on more than the grim premise that we can destroy those who seek to destroy us…. Deterrence can no longer be based solely on the threat of nuclear retaliation."*[245]

In 2002, the George W. Bush Administration withdrew from the ABM Treaty and initiated the deployment of the current Ground-based Midcourse Defense (GMD) system that provides a measure of protection against limited strategic missile threats such as those posed by North Korea and potentially Iran.[246] This deployment program addressed a concern that familiar deterrence strategies may not function reliably against rogue states. As a major inflection point in the evolution of U.S. nuclear policy, it represented a move away from the "balance of terror" paradigm vis-à-vis rogue states that had been a hallmark of the Mutual Assured Destruction ("MAD") theory and that led to the signing of the ABM Treaty three decades earlier. It was also the realization of a more balanced offense-defense deterrence policy in the wake of the Reagan Administration's aspiration for a defense-dominant approach that was embodied in the original SDI program. It followed a reassessment of the value of homeland defenses and facilitated greater cooperation between the United States and allied countries on measures to protect allied forces and populations against theater missile threats.

The U.S. move to pursue limited homeland missile defense goals was a response to the proliferation of strategic missile capabilities, coupled with nuclear weapons programs, to rogue states. The resultant policy and programs were never intended to provide defenses against great power missile threats, including Russia's more robust and sophisticated ballistic missile forces. President Bush called for new concepts of deterrence and was clear in enunciating the reasons for the U.S. withdrawal from the ABM Treaty, which he called a "relic of the Cold War." In a 2001 speech at the National Defense University, he declared:

> We need a new framework that allows us to build missile defenses to counter the different threats of today's world. To do so, we must move beyond the constraints of the 30-year-old ABM Treaty. This treaty does not recognize the present, or point us to the future. It enshrines the past. No treaty that prevents us from addressing today's threats, that prohibits us from pursuing promising technology to defend ourselves, our friends and our allies is in our interests or in the interests of world peace.[247]

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[245] See, President George W. Bush, *Speech by President George W. Bush, National Defense University*, May 1, 2001, available at https://fas.org/nuke/control/abmt/news/010501bush.html.

[246] The Bush Administration also pursued other strategic missile defense programs that were not deployed (e.g., the Kinetic Energy Interceptor, the Airborne Laser, and the Multiple Kill Vehicle) and upgraded some *Arleigh Burke-class* destroyers and *Ticonderoga-class* cruisers for a missile defense mission.

[247] President George W. Bush, op. cit.

In announcing the decision to withdraw from the treaty, President Bush stated, "I have concluded the ABM treaty hinders our government's ways to protect our people from future terrorist or rogue state missile attacks…. Defending the American people is my highest priority as commander in chief and I cannot and will not allow the United States to remain in a treaty that prevents us from developing effective defenses."[248]

The initial U.S. deployment of missile defenses as part of the GMD system was designed to protect the homeland against the threat of rogue state missile launches from countries like North Korea. The GMD system, initially considered by the Clinton Administration[249] and first deployed by the George W. Bush Administration in 2004, currently consists of 44 ground-based interceptors (GBIs) emplaced in silos at Fort Greely, Alaska and Vandenberg Air Force Base, California. The interceptors use kinetic, or "hit-to-kill," technology to destroy an incoming warhead by colliding with it. At the time of the U.S. withdrawal from the ABM Treaty, Russia was reportedly estimated to have more than 10,000 nuclear weapons.[250] The limited GMD system was clearly grossly inadequate to defend the United States against any serious Russian strategic nuclear attack. This is true even today, despite the fact that the overall nuclear arsenals of both countries have declined further.

It was not U.S. policy, nor would it have been technologically feasible, to defend the United States against the full range of Russian strategic forces with only 44 interceptors. In fact, the United States took pains to reiterate that the GMD system was designed to protect against limited rogue state missile threats. This policy has not changed and has been reaffirmed on a bipartisan basis by every U.S. administration from President George W. Bush to President Obama to President Trump. The United States continues to rely on the threat of offensive retaliation to deter Russia (or China).[251] By contrast, former Pentagon official Mark Schneider noted that the Soviet/Russian missile defense system is designed to counter ballistic missile attacks by the United States, not missile threats from rogue nations.[252] The Russian Federation has more interceptors protecting Moscow than the United States has protecting its entire homeland.

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[248] Terence Neilan, "Bush Pulls Out of ABM Treaty; Putin Calls Move a Mistake," *The New York Times*, December 13, 2001, available at https://www.nytimes.com/2001/12/13/international/bush-pulls-out-of-abm-treaty-putin-calls-move-a-mistake.html.

[249] Even the Clinton Administration's consideration of a missile defense system was criticized by missile defense skeptics who asserted that "the cost of this defense will not simply be measured in dollars. It may include an end to further nuclear arms reductions with Russia, and increased Chinese effort to expand its nuclear forces in response to the defense…and an eventual collapse of global arms control and nonproliferation efforts." See, Theodore A. Postol, "The Target Is Russia," *Bulletin of the Atomic Scientists*, Vol. 56, No. 2 (March/April 2000), p. 31, available at https://journals.sagepub.com/doi/pdf/10.2968/056002010.

[250] Kristensen and Norris, op. cit., p. 78.

[251] For example, the Obama Administration's 2010 *Ballistic Missile Defense Review Report* states: "While the GMD system would be employed to defend the United States against limited missile launches from any source, it does not have the capacity to cope with large scale Russian or Chinese missile attacks, and is not intended to affect the strategic balance with those countries." See Department of Defense, *Ballistic Missile Defense Review Report*, February 2010, p. 13, available at https://archive.defense.gov/bmdr/docs/BMDR%20as%20of%2026JAN10%200630_for%20web.pdf. Likewise, the Trump Administration's 2019 *Missile Defense Review* notes, "The United States relies on nuclear deterrence to address the large and more sophisticated Russian and Chinese intercontinental ballistic missile capabilities…. " See Department of Defense, *Missile Defense Review*, January 2019, p. IX, available at https://media.defense.gov/2019/Jan/17/2002080666/-1/-1/1/2019-MISSILE-DEFENSE-REVIEW.PDF.

[252] Telephone interview conducted on May 19, 2020.

In his foreword to the 2001 *Nuclear Posture Review*, Secretary of Defense Donald Rumsfeld highlighted the development of a "new relationship" with Russia, noting that "as a result of this review, the U.S. will no longer plan, size or sustain its forces as though Russia presented merely a smaller version of the threat posed by the former Soviet Union."[253] The Bush Administration's approach to Russia was reiterated by Secretary Rumsfeld in his 2002 *Annual Report to the President and the Congress*, where he explicitly stated that "Russia is no longer an enemy."[254]

Yet, the president's missile defense decision was roundly condemned by arms control enthusiasts who believed abandoning the ABM Treaty was a dangerous mistake. Most of the critics' arguments were based on the action-reaction metaphor (and its inaction-inaction corollary) suggesting that an arms race would ensue. One critic argued that the "repudiation of defense" codified by the ABM Treaty "was arguably the most important intellectual achievement of the Cold War" and that the decision to withdraw from the treaty "not only…destroy[ed] the arms reduction process (immediately killing START II), it made inevitable the next round of arms escalation."[255] Such criticisms were reminiscent of the arguments made in the 1960s and 1970s against missile defense and in support of the ABM Treaty—arguments which proved faulty.

Then-Senator Joseph Biden declared, "The administration has not offered any convincing rationale" for its decision, and he criticized the president for "walking away from a treaty that has helped keep the peace for the last 30 years."[256] Senator Carl Levin declared that abandoning the ABM Treaty and deploying missile defenses "could result in more nuclear weapons on Russian soil… [and] could result in many more nuclear weapons in China, prompting a buildup in India and Pakistan…."[257] A former U.S. Ambassador to NATO, along with a former National Security Council staff member, argued that Washington's unilateral withdrawal "would be a foreign policy disaster" and that "Russia would respond by abandoning its commitment under the START-2 Treaty to slash its nuclear forces." The "Doomsday Clock," which had been resting at nine minutes to midnight for the past four years, was advanced to seven minutes to midnight—in part because of the U.S. "abandonment" of the ABM Treaty. The editors of the *Bulletin of Atomic*

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[253] Donald H. Rumsfeld, *Nuclear Posture Review Report*, January 2002, available at https://archive.defense.gov/news/Jan2002/d20020109npr.pdf.

[254] Donald H. Rumsfeld, *Annual Report to the President and the Congress*, 2002, p. 83, available at https://history.defense.gov/Portals/70/Documents/annual_reports/2002_DoD_AR.pdf?ver=2014-06-24-153732-117.

[255] James Carroll, "The Paradox of Missile Defense," *The Boston Globe*, June 9, 2007, available at http://www.envirosagainstwar.org/2007/06/09/the-paradox-of-missile-defense/.

[256] Cited in, David E. Sanger and Elisabeth Bumiller, "U.S. to Pull Out of ABM Treaty, Clearing Path for Antimissile Tests," *The New York Times*, December 12, 2001, available at https://www.nytimes.com/2001/12/12/world/us-to-pull-out-of-abm-treaty-clearing-path-for-antimissile-tests.html.

[257] "Remarks of Senator Carl Levin on National Missile Defense," National Defense University Forum Breakfast on Ballistic Missile Defense, May 11, 2001, p. 4, cited in, Payne, *The Great American Gamble: Deterrence Theory and Practice from the Cold War to the Twenty-First Century*, op. cit., p. 224. It should be noted that China's strategic nuclear modernization programs, as one analysis concluded, "were initiated over a decade ago and were probably not a direct response to NMD [National Missile Defense]." See Center for Nonproliferation Studies, *China's Opposition to US Missile Defense Programs* (Archived Material), 2000, cited in, Payne, *The Great American Gamble: Deterrence Theory and Practice from the Cold War to the Twenty-First Century*, op. cit., p. 320.

*Scientists* called the administration's rationale for dispensing with the ABM Treaty "disingenuous," predicting that "abandoning the treaty will have serious repercussions for years to come."[258]

The Russian response was much different. Russian President Vladimir Putin stated that, although Moscow considered the U.S. decision "mistaken," Russia had the ability to counter U.S. missile defenses and, "Therefore I fully believe that the decision taken by the president of the United States does not pose a threat to the national security of the Russian Federation."[259]

While it is true that Russia responded to the U.S. withdrawal by announcing it would no longer adhere to the provisions of START II, the treaty itself never entered into force, and the Russian announcement was characterized as "largely symbolic."[260] In fact, as Amb. Robert Joseph noted, while the conclusion of the ABM Treaty in 1972 led to the largest Soviet strategic nuclear buildup in history—contrary to the predictions of its supporters who believed U.S. inaction on strategic defenses would be matched by Soviet inaction on strategic offenses—the U.S. withdrawal from the treaty 30 years later was followed by an actual *decrease* in Russia's strategic nuclear arsenal.[261] This is the opposite of what critics predicted and hardly supports the action-reaction arms race narrative put forth in public by the Bush Administration's critics and arms control devotees.

Indeed, Moscow sought a legally binding agreement that would commit the United States to the proposed reductions that had been identified in the 2001 NPR. As President Putin stated, "a particularly important task… is putting a legal seal on the achieved agreements on further radical, irreversible and verifiable cuts of strategic offensive weapons…."[262] This led in 2002 to the signing of the Strategic Offensive Reductions Treaty ("SORT" or the "Moscow Treaty"), in which both sides agreed to reduce the number of their operationally deployed strategic nuclear weapons to 1,700-2,200 by the end of 2012.

These reductions demonstrated not only that arms control was possible in the absence of the ABM Treaty and the move by the United States to deploy limited strategic missile defenses, but that the fielding of such defenses was no bar to the most significant negotiated nuclear offensive force reductions. As former Secretary of State Condoleezza Rice and former Secretary of Defense Robert Gates noted, "Talk of a new 'arms race' with Russia is anachronistic and not grounded in reality: America and Russia under the Treaty of Moscow are reducing our nuclear warheads to levels not seen in decades."[263] This was precisely the opposite of what the critics of strategic missile defense predicted, which is fully consistent with how the inaction-inaction

[258] "It's seven minutes to midnight," *Bulletin of the Atomic Scientists*, March/April 2002, pp. 4-5, available at https://thebulletin.org/sites/default/files/2002%20Clock%20Statement.pdf.

[259] *Statement by Russian President Vladimir Putin Regarding the Decision of the Administration of the United States of America to Withdraw from the Antiballistic Missile Treaty of 1972*, December 13, 2001, available at https://russianlife.com/stories/online/putin-abm-withdrawal/.

[260] Wade Boese, "U.S. Withdraws From ABM Treaty; Global Response Muted," *Arms Control Today*, July/August 2002, available at https://www.armscontrol.org/act/2002-07/news/us-withdraws-abm-treaty-global-response-muted.

[261] Telephone interview conducted on May 7, 2020.

[262] *Statement by Russian President Vladimir Putin Regarding the Decision of the Administration of the United States of America to Withdraw from the Antiballistic Missile Treaty of 1972*, op. cit.

[263] Robert Gates and Condoleezza Rice, "Commentary: The West Needs a Defense System That Works," *American Forces Press Service*, April 26, 2007, available at https://archive.defense.gov/news/newsarticle.aspx?id=32960.

argument against missile defense fared in the 1970s. It also validates the point, best expressed by Colin Gray, that political relations are a key factor in armament decisions—a fact often ignored by those who assert mechanistic notions like the action-reaction paradigm.

Nevertheless, Russia has recently sought to portray its new strategic offensive nuclear programs as a response to the U.S. withdrawal from the ABM Treaty in 2002 and subsequent U.S. missile defense actions. For example, in an address to the Federal Assembly on March 1, 2018, Russian President Vladimir Putin declared that Moscow's development of novel strategic offensive weapons systems was "in response to the unilateral withdrawal of the United States of America from the Anti-Ballistic Missile Treaty and the practical deployment of their missile defense systems both in the U.S. and beyond their national borders."[264] This shift in Russia's position reflects the broader decline in the U.S.-Russia bilateral relationship and was a change in tone from 2014 when Russian Foreign Minister Sergei Lavrov stated, "I don't think we are on the verge of a new arms race. At least, Russia definitely won't be part of it. In our case, it's just that the time has come for us to modernize our nuclear and conventional arsenals."[265] Although acknowledging that "It is highly unlikely that the missile defense system developed by the U.S. could pose a realistic threat to Russian strategic forces," Pavel Podvig, Senior Researcher at the United Nations Institute for Disarmament Research, has asserted that the U.S. missile defense effort "is responsible for a number of new development efforts that were initiated or resumed following the U.S. withdrawal from the ABM treaty in 2002."[266]

Russia's action immediately after the U.S. withdrawal from the ABM Treaty—namely signing the SORT agreement and stating that the U.S. withdrawal is not a threat to Russia's interests—demonstrates that the narrative that Russia's development of new strategic nuclear systems was a *reaction* to U.S. missile defense activities (a narrative now advanced by Moscow and repeated by various domestic critics of U.S. missile defense policy) is false. Russia's modernization of its missile defense capabilities clearly was not simply a reaction to U.S. missile defense developments. As several "oral history" interviewees pointed out, Russia had pursued new offensive nuclear programs well before the U.S. withdrawal from the ABM Treaty and before the United States deployed its limited missile defense capabilities.

**Summary**

The Bush Administration's withdrawal from the ABM Treaty was derided by critics as opening the doors to a new action-reaction spiral in the arms race. Supporters of the ABM Treaty argued that the United States was abandoning efforts to manage the strategic competition through arms control and that the inevitable Russian reaction would lead to an increased Russian nuclear arsenal, diminished U.S. security, a more dangerous strategic balance, and an increased prospect of nuclear war.

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[264] Vladimir Putin, *Presidential Address to the Federal Assembly*, March 1, 2018, available at http://en.kremlin.ru/events/president/news/56957.

[265] Gabriela Baczynska, "Russia's Lavrov Says Time Has Come to Upgrade Nuclear, Conventional Arms," *Reuters*, September 28, 2014, https://www.reuters.com/article/us-russia-nuclear-idUSKCN0HN0EI20140928.

[266] Pavel Podvig, "Russia's Current Nuclear Modernization and Arms Control," *Journal for Peace and Nuclear Disarmament*, Vol. 1, No. 2 (October 2018), available at https://www.tandfonline.com/doi/full/10.1080/25751654.2018.1526629.

In reality, the U.S. withdrawal from the ABM Treaty and the movement toward greater U.S. nuclear reductions coincided with the unprecedented Moscow Treaty reductions. In this instance, the action-reaction arms control narrative was stood on its head. Contrary to the predictions of critics, the largest reduction of deployed nuclear weapons in history occurred in the *absence* of the ABM Treaty and *after* the announced deployment of an initial U.S. missile defense system.

This is another example of how the typical action-reaction/inaction-inaction arms race arguments conflict with historical reality. It demonstrates that U.S. actions again did not drive Russian responses in ways predicted by missile defense critics. A new arms control agreement between the United States and Russia was reached and nuclear reductions were achieved, while the United States abandoned the constraints of a Cold War agreement considered by some to be the "crown jewel" of arms control and proceeded to deploy missile defenses to protect the U.S. homeland against limited missile threats. It also demonstrates again how faulty are mechanistic models of arms racing that do not include political relations, context, and strategic cultures as significant factors in armament decisions. While they are frequently used in arguments against U.S. systems, particularly including missile defense, they are more likely to mislead than to enlighten.

# Chapter IX
# Rogue States, Nuclear Terrorism and Nonproliferation, and Reduced U.S. Reliance on Nuclear Weapons

*"The most immediate and extreme threat today is nuclear terrorism…. Today's other pressing threat is nuclear proliferation."*[267]

Following the collapse of the Soviet Union and the end of the Cold War, U.S. relations with Russia become much more amicable for a time and the future of U.S-Russian relations appeared bright. The focus of U.S. strategy shifted away from deterrence of Russia, and nuclear weapons were judged to be of limited relevance for the United States in addressing the new priority post-Cold War security challenges of rogue states, terrorism, and proliferation. In the words of the Clinton Administration, "U.S. nuclear weapons for years were justified by the potential for a massive conventional attack by the Warsaw Pact through the Fulda Gap which would overwhelm NATO conventional forces…. No equivalent threat to American vital interests can be identified in the post-Cold War era, and for very few of the existing threats are nuclear weapons appropriate responses."[268]

Official U.S. concern over Russian military developments—including Russia's nuclear doctrine and posture—waned dramatically. A declared U.S. goal was to devalue the role of nuclear weapons. Franklin Miller referred to this period as the beginning of the "years of drift."[269] In 1993, the Clinton Administration promulgated its "Counterproliferation Initiative," which elevated WMD proliferation as the primary threat to the United States, focusing on cooperative threat reduction measures with Russia and the states of the former Soviet Union. In addition, the Clinton Administration conducted the first post-Cold War review of U.S. nuclear posture and programs.

The 1994 *Nuclear Posture Review* (NPR) adopted a "lead and hedge" strategy, articulating the view that "nuclear weapons are playing a smaller role in U.S. security than at any other time in the nuclear age" and that the "United States requires a much smaller nuclear arsenal under present circumstances." Indeed, the 1994 NPR noted, "Major reductions in U.S. nuclear weapons are already underway, confirming the U.S. commitment to a smaller international role for nuclear weapons."[270] However, the NPR also emphasized the need for "flexibility" to respond, if necessary, to "unanticipated challenges."[271] This was the "hedge" element of the NPR's "lead and hedge" motto.

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[267] Department of Defense, *Nuclear Posture Review*, April 2010, p. 3, available at https://dod.defense.gov/Portals/1/features/defenseReviews/NPR/2010_Nuclear_Posture_Review_Report.pdf.

[268] Department of Defense, *Annual Report to the President and the Congress, 1995*, February 1995, pp. 84-85, available at https://history.defense.gov/Portals/70/Documents/annual_reports/1995_DoD_AR.pdf?ver=2014-06-24-152712-813.

[269] Telephone interview conducted on May 15, 2020.

[270] William J. Perry, "Nuclear Posture Review," in *Annual Report to the President and the Congress, 1995*, op. cit., p. 83.

[271] Department of Defense, *News Release*, "DoD Review Recommends Reduction in Nuclear Force," September 22, 1994, p. 2, available at http://nautilus.org/wp-content/uploads/2015/07/dodpr092294.pdf.

Through quantitative reductions in the U.S. nuclear arsenal, the United States would "demonstrate leadership" by "reducing the role of nuclear weapons in U.S. security" at a time when "the proliferation of nuclear weapons and other weapons of mass destruction, rather than the nuclear arsenal of a hostile superpower, poses the greatest security risk."[272] Continuing a process that began in the George H.W. Bush Administration, the U.S. nuclear weapons stockpile was reduced, strategic bombers were taken off day-to-day alert, non-strategic nuclear weapons were cut by 90 percent, and the nation's airborne command and control aircraft fleet was reduced substantially, "reflecting the decline in the likelihood of a superpower confrontation."[273]

As the United States deferred its nuclear weapons modernization efforts and scaled back its overall defense posture in the expectation of a "peace dividend," new nuclear weapon states emerged. Pakistan joined India as a member of the nuclear club in 1998 and North Korea conducted its first nuclear weapons test in 2006. These cases further illustrate that countries will pursue capabilities that they deem in their interest rather than being prisoners to the mechanistic logic of a U.S.-led action-reaction arms race.

This shift in U.S. policy thinking and nuclear posture, which extended over multiple administrations, was a major inflection point in U.S. nuclear policy. It was characterized by optimistic assessments regarding the U.S. ability to influence Russian behavior in a positive direction. In fact, the United States and Russia were said to face similar threats from proliferation and terrorism, making cooperative engagement mutually beneficial by transitioning the bilateral relationship away from political and military hostility. By downgrading the role of nuclear weapons in U.S. national security policy and shifting the emphasis away from Russia and toward other threats, it was hoped that Russia (and potentially others) would follow suit, demonstrating that U.S. nuclear restraint would induce similar Russian nuclear restraint, consistent with the inaction-inaction narrative.

As the 1994 NPR noted, these reductions were intended to "help shape [the] future."[274] Declaring that "we are on the threshold of a decade of planned reductions," the NPR declared, "We have terminated almost all of our nuclear modernization programs," and that "No new strategic systems are under development or planned."[275] This was characterized by some as the beginning of a nuclear "procurement holiday."[276]

At the time, Russia reportedly possessed a total nuclear weapons arsenal roughly twice the size of the U.S. arsenal.[277] Russia's inventory of nuclear weapons did, in fact, decline in the years following the dissolution of the Soviet Union; however, this was due to a combination of factors, including the ageing of older, Soviet-built systems, a decline in Russia's ability to replace systems on a one-for-one basis given that former Soviet production facilities were now located in newly-

[272] Ibid., pp. 84-85.

[273] Ibid., p. 86.

[274] Department of Defense, *Nuclear Posture Review* (slides), September 22, 1994, available at http://nautilus.org/wp-content/uploads/2015/07/dodnprslides092294.pdf.

[275] Department of Defense, *News Release*, op. cit., pp. 1, 4.

[276] Peter Huessy, "The 40 Year Nuclear Procurement Holiday," *RealClear Defense*, October 11, 2016, available at https://www.realcleardefense.com/articles/2016/10/12/the_40_year_nuclear_procurement_holiday_110195.html.

[277] Kristensen and Norris, op. cit., p. 78.

independent countries, and the effects of the overall post-Soviet economic decline in the Russian Federation.

In many respects, the George W. Bush Administration's approach to Russian nuclear developments was similar to the Clinton Administration's policy. As noted earlier, the Bush Administration's 2001 *Nuclear Posture Review* concluded that "the U.S. will no longer plan, size or sustain its forces as though Russia presented merely a smaller version of the threat posed by the former Soviet Union."[278] As the potential for Russian aggression was viewed as unlikely, the number of accountable U.S. strategic nuclear weapons declined by more than 60 percent—from approximately 6,000 under the 1991 Strategic Arms Reduction Treaty (START), to between 1,700 and 2,200 under the 2002 Strategic Offensive Reduction Treaty (SORT or "Moscow Treaty").[279] These lower numbers were proposed in the 2001 NPR, and the Bush Administration was prepared to achieve them unilaterally. The MX "Peacekeeper" ICBM was eliminated from the active U.S. inventory in 2005; B-1 bombers were converted to a conventional-only role (the aircraft's nuclear mission was eliminated in 1994, as first proposed in that year's NPR); and the number of Ohio-class nuclear ballistic missile submarines (SSBNs) was reduced.[280]

The Bush Administration did call for major improvements in U.S. military capabilities as part of the "New Triad" construct outlined in the 2001 NPR[281] and did move forward (after withdrawing from the ABM Treaty in 2002) with deployment of an initial rudimentary missile defense system to protect the nation against rogue state missile threats; however, it too sought to work cooperatively with Russia as a strategic partner rather than an adversary and refrained from seeking defenses against the strategic nuclear arsenals of Russia and China.

Similar post-Cold War threat perceptions and priorities shaped the Obama Administration's initial approach to U.S. nuclear weapons policy, as the potential for Russian aggression against the West continued to be seen as unlikely. However, President Obama went further than his predecessor and declared the global elimination of nuclear weapons—what he termed "the most dangerous legacy of the Cold War"—to be a U.S. policy priority. This was reflected in his 2009 Prague speech[282] and in the 2010 *Nuclear Posture Review*.[283] As the 2010 NPR noted:

> As part of our effort to move toward a world free of nuclear weapons, the United States will lead expanded international efforts to rebuild and strengthen the global nuclear non-

[278] Department of Defense, Foreword to the *Nuclear Posture Review Report*, 2001, available at https://fas.org/sgp/news/2002/01/npr-foreword.html.

[279] Although this represented a significant decline, the total number of nuclear weapons on both sides was greater than what was "accountable" for arms control verification purposes.

[280] Donald H. Rumsfeld, "Adapting U.S. Strategic Forces," in, *Annual Report to the President and the Congress*, 2002, p. 90, available at https://history.defense.gov/Portals/70/Documents/annual_reports/2002_DoD_AR.pdf?ver=2014-06-24-153732-117.

[281] The "New Triad" included three main elements: Strike Forces (to include the traditional nuclear Triad along with advanced conventional capabilities); Defensive Capabilities (including active and passive defenses); and Robust Infrastructure (to ensure the capability of the defense enterprise to support U.S. military requirements).

[282] *Remarks By President Barack Obama In Prague As Delivered*, April 5, 2009, available at https://obamawhitehouse.archives.gov/the-press-office/remarks-president-barack-obama-prague-delivered.

[283] Department of Defense, *Nuclear Posture Review Report*, April 2010, pp. 48-49, available at https://dod.defense.gov/Portals/1/features/defenseReviews/NPR/2010_Nuclear_Posture_Review_Report.pdf.

> proliferation regime and to accelerate efforts to prevent nuclear terrorism. Concerns have grown in recent years that unless today's dangerous trends are arrested and reversed, before long we will be living in a world with a steadily growing number of nuclear-armed states and an increasing likelihood of terrorists getting their hands on nuclear weapons. Therefore, for the first time, the 2010 NPR places this priority atop the U.S. nuclear agenda.[284]

In short, beginning in the 1990s and for approximately two and a half decades, a bipartisan U.S. response to the end of the Cold War was apparent: the United States displayed "a great degree of strategic complacency" vis-à-vis Russia.[285] This "complacency" was not without an apparent underlying rationale. It was based on a combination of trends, including the change in U.S. threat perceptions; optimistic expectations regarding U.S-Russian relations; and the perceived superiority of U.S. conventional forces. Frank Rose characterized this period as one of U.S. "strategic restraint," noting however that, "It does not appear that Russia, China, India, Pakistan, North Korea, or Iran followed the U.S. lead."[286]

During this period, the United States stopped developing new nuclear weapons designs, cancelled or delayed strategic systems and modernization efforts, ended underground nuclear testing, and continued to allow its nuclear weapons production complex to atrophy. Under the 1991 Presidential Nuclear Initiatives (PNIs), the United States also eliminated all forward deployed short-range ground-based nuclear systems and ended deployment of tactical nuclear weapons on naval vessels and aircraft.[287] Moreover, the United States and NATO reduced the number of conventional forces in Europe.

This restraint (or inaction), however, was not reciprocated by others. For example, except for the United States, every other nuclear weapons state continued to develop and deploy new nuclear weapons. While the United States ended explosive testing of nuclear weapons in 1992, France, China, India, and Pakistan subsequently carried out their own series of nuclear tests, and the latest U.S. State Department arms control compliance report notes that "Russia has conducted nuclear weapons experiments that have created nuclear yield."[288] And despite U.S. adherence to the PNIs, the United States has determined that "Russia is not adhering to all of its PNI commitments" and "based on Russian activities and statements from Russian officials and military officers from 1994 through the mid-2000s, that Russia no longer feels bound by its PNI pledge to eliminate all nuclear warheads for the ground forces."[289] These actions again demonstrate the fallacy of the inaction-inaction corollary to the action-reaction thesis and suggest that other states

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[284] Ibid., p. 9.

[285] The White House, *National Security Strategy of the United States of America*, December 2017, p. 27, available at https://www.whitehouse.gov/wp-content/uploads/2017/12/NSS-Final-12-18-2017-0905.pdf.

[286] Telephone interview conducted on May 11, 2020.

[287] Department of State, Bureau of Arms Control, Verification and Compliance, *Adherence to and Compliance with Arms Control, Nonproliferation, and Disarmament Agreements and Commitments*, June 2020, pp. 23-26, available at https://www.state.gov/wp-content/uploads/2020/06/2020-Adherence-to-and-Compliance-with-Arms-Control-Nonproliferation-and-Disarmament-Agreements-and-Commitments-Compliance-Report.pdf.

[288] Ibid., pp. 46, 50.

[289] Ibid., p. 24.

base their actions on unique national security considerations and not necessarily on prior decisions taken by the United States.

Although acknowledging that "Russia continues to modernize its still-formidable nuclear forces," the 2010 NPR declared that "Russia and the United States are no longer adversaries, and prospects for military confrontation have declined dramatically."[290] As a result, the United States sought to reduce further its nuclear weapons arsenal, and the 2010 New START treaty placed a limit on both sides of 1,550 accountable deployed nuclear weapons, 700 accountable deployed strategic nuclear delivery vehicles (SNDVs), and 800 total accountable deployed and non-deployed SNDVs.

While the limits of the Moscow Treaty apply to each side's strategic forces, the reductions it demanded apparently were almost exclusively in the U.S. strategic nuclear arsenal. At the time of the treaty, the United States was above these limits and Russia was below them; consequently, New START was the first strategic arms control treaty to require U.S. reductions while allowing Russia to build *up* to the limits. As one organization in favor of arms control lamented in 2015, "Three and a half years after New START entered into force, Russia reportedly has more warheads deployed than when the treaty became active."[291] In 2013, the Obama Administration expressed a desire to negotiate further significant reductions in deployed U.S. and Russian strategic nuclear forces.[292] However, the administration's preference for a follow on agreement went unrealized after Russia rejected negotiations for further nuclear reductions. Russia subsequently invaded Ukraine and annexed Crimea, causing relations between the two countries to reach their lowest point in the post-Cold War era.

The belief that "Russia is not an enemy," that further nuclear reductions were warranted, and that refocusing U.S. nuclear posture toward the proliferation challenges posed by rogue states and terrorist groups would engender Moscow's cooperation as a strategic partner reflected a view that the world was not defined by competing great power national interests and that the United States was so uniquely powerful conventionally that it did not need to rely on nuclear weapons and should set an example for others to follow. However, Russia continued its extensive nuclear modernization program, refused to negotiate over its advantage in non-strategic nuclear weapons, criticized U.S. missile defense programs as provocative and destabilizing, and repeatedly sought to undermine U.S. foreign policy goals though its aggressive behavior, including its military aggression against Ukraine and the illegal annexation of Crimea. Moscow not only modernized its New START-accountable nuclear weapons but developed new strategic forces outside the treaty's constraints.

By the end of the Obama Administration it was clear that the hoped-for cooperative relationship with Russia was a chimera and that U.S. inaction on nuclear matters was not followed by similar

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[290] Department of Defense, *Nuclear Posture Review Report*, April 2010, op. cit., p. iv.

[291] "January 2015 Doomsday Clock Annual Statement: Three Minutes and Counting," *Bulletin of the Atomic Scientists*, January 2015, available at https://thebulletin.org/sites/default/files/2015%20Clock%20Statement.pdf.

[292] See, *Remarks by President Obama at the Brandenburg Gate—Berlin, Germany*, June 19, 2013, available at https://obamawhitehouse.archives.gov/the-press-office/2013/06/19/remarks-president-obama-brandenburg-gate-berlin-germany.

Russian inaction. In fact, it is likely that U.S. inaction created an incentive for Russian action that would provide Moscow with a strategic advantage.

The expectation of an inaction-inaction dynamic led by the United States betrays a mistaken view that Russian armament programs are reactive and driven by the Western concept of parity and mutual stability. This was explicitly noted by Amb. Robert Joseph, who stated that the Russians "don't believe in 'parity,' they don't believe in 'stability'…. These are Western concepts. They believe in superiority."[293] Russia's behavior and its force goals—like Soviet Cold War behavior and force goals—appear to be driven by uniquely Russian requirements. Indeed, it would be imprudent to expect otherwise. As Chief of the Russian General Staff Gen. Valery Gerasimov stated in 2019, "We must make every effort to ensure our technical, technological and organizational superiority over any potential enemy."[294] With respect to Moscow's new strategic nuclear systems, Gerasimov declared that Russia's development of "new types of weapons" left "no doubt… that in this area we are confidently leading in comparison with the technologically developed countries of the world."[295] And in the area of missile defense, Russia's then-Ambassador to NATO Dmitry Rogozin stated in 2011, "Concerning our aerospace and national missile defense, we will be working on it irrespective of what the United States and NATO are going to build…. We regulate the pace of ensuring our defense capability and aspects of this work, guided by our own needs."[296]

Russia's 2010 military doctrine established Russia's policy of using nuclear weapons not just in response to a nuclear attack, but under other circumstances, stating, "The Russian Federation reserves the right to utilize nuclear weapons in response to the utilization of nuclear and other types of weapons of mass destruction against it and (or) its allies, and also in the event of aggression against the Russian Federation involving the use of conventional weapons when the very existence of the state is under threat."[297]

Subsequent iterations of Russia's military doctrine suggest that "Russia has potentially placed a greater reliance on nuclear weapons and may threaten to use them during regional conflicts."[298] This has been characterized as an "escalate to de-escalate" strategy, whereby Russia envisages its use of limited nuclear threats to coerce Western concessions or the actual limited employment of nuclear weapons to terminate a conflict on terms favorable to Moscow. Russian officials also

[293] Telephone interview conducted on May 7, 2020.

[294] "Russia's new military doctrine: preparation for large-scale war," *UAWire*, March 10, 2019, available at https://www.uawire.org/russia-s-new-military-doctrine-preparation-for-large-scale-war. Also see, "Russian General Says Nuclear Arsenal Guarantees Superiority Over NATO," *The Moscow Times*, January 30, 2015, available at https://www.themoscowtimes.com/2015/01/30/russian-general-says-nuclear-arsenal-guarantees-superiority-over-nato-a43404.

[295] "Vectors of the development of military strategy," *Krasnaya Zvezda (Red Star),* April 3, 2019, available at http://redstar.ru/vektory-razvitiya-voennoj-strategii/?attempt=1.

[296] "Russia Will Build Its Own Missile Defense System By All Means—Rogozin," *Interfax*, July 1, 2011, available at https://webcache.googleusercontent.com/search?q=cache:EofFZh7BcjwJ:https://interfax.com/newsroom/top-stories/59949/+&cd=13&hl=en&ct=clnk&gl=us.

[297] *The Military Doctrine of the Russian Federation*, February 5, 2010, available at https://carnegieendowment.org/files/2010russia_military_doctrine.pdf.

[298] Amy F. Woolf, "Russia's Nuclear Weapons: Doctrine, Forces, and Modernization," *Congressional Research Service*, CRS Report R45861, January 2, 2020, available at https://fas.org/sgp/crs/nuke/R45861.pdf.

spoke openly of the "preemptive" use of nuclear weapons in a conventional conflict.[299] Indeed, in recent years, Russian officials have threatened NATO allies and non-NATO states with nuclear attack, including Ukraine, Norway, Denmark, and the Baltic states.[300] And in June 2020, Russian President Putin endorsed an expanded version of Russia's military doctrine that allows the use of nuclear weapons if Moscow receives "reliable information" of a missile attack or if Russia's critical government or military infrastructures are threatened by conventional forces.[301] As noted Russian journalist Pavel Felgenhauer has pointed out, "The reasons [for Russia] to use nuclear warheads are widespread and open to interpretation, effectively giving the Kremlin the legal right to ratchet up the threat whenever it pleases."[302]

These developments provide additional evidence of a sharp contrast between U.S. and Russian approaches to nuclear weapons issues. They reveal that Russian force objectives serve Russian purposes well beyond those presumed by the action-reaction metaphor, i.e., reacting to U.S. initiatives in order to sustain its side of a balance of terror. They also demonstrate again the inapplicability of the action-reaction metaphor, as used in public debate (and its inaction-inaction corollary), to U.S. and Russian developments.

A 2012 report by the National Intelligence Council (NIC) highlighted the divergence between U.S. and Russian nuclear policy by concluding, "Nuclear ambitions in the US and Russia over the last 20 years have evolved in opposite directions. Reducing the role of nuclear weapons in U.S. security strategy is a U.S. objective, while Russia is pursuing new concepts and capabilities for expanding the role of nuclear weapons in its security strategy."[303] This was a sharp rebuttal to the belief that Russia could be swayed to change its nuclear behavior by following the U.S. lead.

President Obama was a strong believer in the value of arms control and the 2010 New START Treaty supplanted the 2002 Moscow Treaty and the original START Treaty, which expired at the end of 2009. In part, the Obama Administration committed to a robust recapitalization of the nuclear enterprise to get New START approved by the U.S. Senate. However, Russia's aggressive foreign policy behavior led the Obama Administration to propose a sweeping recapitalization plan for the U.S. nuclear Triad, which had not been modernized since the 1980s and was facing an increased risk of obsolescence.

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[299] See for example, "Russia reserves pre-emptive nuclear strike right," *Reuters*, October 13, 2009, available at https://www.reuters.com/article/us-russia-military-nuclear-sb/russia-reserves-pre-emptive-nuclear-strike-right-idUSTRE59C4XK20091013.

[300] See for example, Mark B. Schneider, "Putin's Plan to Send Russians to Heaven," *RealClearDefense*, December 1, 2018, available at https://www.realcleardefense.com/articles/2018/12/01/putins_plan_to_send_russians_to_heaven_113995.html.

[301] Vladimir Isachenkov, "Putin signs Russia's nuclear deterrent policy," *Associated Press*, June 2, 2020, available at https://www.nytimes.com/aponline/2020/06/02/world/europe/ap-eu-russia-nuclear-policy.html.

[302] Pavel Felgenhauer, "Moscow Clarifies Its Nuclear Deterrence Policy," *Eurasian Daily Monitor*, Vol. 17, No. 80 (June 4, 2020), available at https://jamestown.org/program/moscow-clarifies-its-nuclear-deterrence-policy/.

[303] National Intelligence Council, *Global Trends 2030: Alternative Worlds*, Report NIC 2012-001, December 2012, p. 69, available at https://www.dni.gov/files/documents/GlobalTrends_2030.pdf.

This policy shift did not go unnoticed by critics and supporters alike. As one analyst noted:

> What changed was that the White House ceased believing it could work with Russia at a time when much of the Cold War nuclear arsenal was reaching an advanced state of decay. With prospects for further arms reduction agreements rapidly receding, the administration decided it had to move forward with modernization of the entire nuclear enterprise. Although plans to sustain a nuclear "triad" of land-based intercontinental ballistic missiles, sea-based ballistic missiles, and long-range nuclear bombers had been endorsed by the 2010 posture review, the White House initially appeared ambivalent about spending the money needed to revitalize the nuclear arsenal. But any resistance to "recapitalizing" the arsenal disappeared after Russia began threatening Eastern Europe, and conducting nuclear exercises seemingly aimed at scaring the West.
>
> So now Barack Obama, the longtime proponent of nuclear disarmament, finds himself presiding over a vast reconstruction of the nation's strategic force, not to mention the introduction of new aircraft and weapons for conducting tactical nuclear operations in places like Europe.[304]

Some arms control supporters criticized the Obama Administration for not doing enough to reduce nuclear weapons. For example, in another expression of the inaction-inaction narrative, Daryl Kimball and Kingston Reif of the Arms Control Association stated:

> Now is the time to announce that the United States will reduce its strategic nuclear force to 1,000 (or fewer) strategic deployed warheads, invite Russia to do the same, and propose that the two sides agree to resume formal talks to regulate all types of strategic offensive and defensive weapons systems (nuclear and nonnuclear) that could affect strategic stability. Such a strategy could prompt Russia to rethink its expensive nuclear weapons modernization projects and possibly build-down its strategic nuclear arsenal.[305]

Another commented that "the Obama administration still holds the position of being the administration that has cut the least warheads from the stockpile compared with other post-Cold War presidencies."[306] Others asserted that the administration's modernization plans "threaten to create a new arms race."[307]

Such a notion was dismissed by Obama Administration officials themselves. For example, then Secretary of Defense Ashton Carter stated, "…the Russians are also very rapidly modernizing their own nuclear arsenal. I don't associate that with what we're doing. I associate it with the dynamics of their own feelings that nuclear weapons are one of the only things that guarantee

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[304] Loren Thompson, "Obama Backs Biggest Nuclear Arms Buildup Since Cold War," *Forbes*, December 15, 2015, available at https://www.forbes.com/sites/lorenthompson/2015/12/15/obama-backs-biggest-nuclear-arms-buildup-since-cold-war/#1c8e152d2a0f.

[305] Daryl G. Kimball and Kingston Reif, "It's time to cut America's nuclear arsenal," *Bulletin of the Atomic Scientists*, September 30, 2016, available at http://thebulletin.org/it%E2%80%99s-time-cut-america%E2%80%99s-nuclear-arsenal9942.

[306] Hans M. Kristensen, *Obama Administration Announces Unilateral Nuclear Weapon Cuts*, Federation of American Scientists, January 11, 2017, available at https://fas.org/blogs/security/2017/01/obama-cuts/.

[307] "January 2015 Doomsday Clock Annual Statement: Three Minutes and Counting," op. cit.

their status in the world."[308] And Rose Gottemoeller, then-Under Secretary for Arms Control and International Security, stated that "Russia is engaged in its own nuclear modernization program to replace Cold War era systems, and we believe Russia will proceed on this course irrespective of U.S. modernization…. There is no evidence that… our nuclear modernization program [is] prompting an action-reaction cycle or catalyzing arms races."[309] As National Institute for Public Policy analyst Matthew Costlow pointed out, then-Vice President Biden noted U.S. leadership away from nuclear weapons did not change Russian minds, saying, "While we [U.S.] have shifted our security doctrine away from our nuclear arsenal, they [Russia] have moved to rely more heavily on theirs."[310]

Some oral history participants asserted that the Obama Administration was initially driven by a predisposition toward arms control and nuclear reductions. Frank Rose, Assistant Secretary of State for Arms Control, Verification and Compliance in the Obama Administration, noted that President Obama placed priority on reducing the size of the U.S. nuclear arsenal, consistent with the goal of ultimately eliminating nuclear weapons.[311] As the Russian emphasis on nuclear capabilities and the reemergence of Russian geopolitical hostility became increasingly apparent, senior Obama Administration Defense Department officials James Miller and John Harvey observed that the administration's decisions were based on legitimate deterrence and extended deterrence considerations, as well as the need to recapitalize aging systems.[312] As James Miller put it, "The Russians were already modernizing extensively" during the Obama Administration and to suggest their actions were a response to U.S. programs "would imply a degree of time travel that we're not capable of."[313]

**Summary**

The post-Cold War environment saw the United States seek to engage Russia as a strategic partner rather than an adversary. This occurred over multiple administrations, both Democrat and Republican. The United States exercised restraint in its nuclear and conventional force programs, foregoing the comprehensive modernization of its strategic Triad, in the expectation that Russia would likewise show restraint in its own nuclear programs, i.e., inaction-inaction. However, Russian nuclear modernization programs continued apace, despite official expectations of an inaction-inaction interaction. Moscow continued to develop new types of strategic and non-strategic nuclear systems, considered the United States and its NATO allies the greatest threat to the Russian Federation, and spoke openly about the preemptive use of nuclear weapons.

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[308] Ashton Carter, "Full transcript: Vox interviews Defense Secretary Ash Carter," *Vox.com*, April 13, 2016, available at http://www.vox.com/2016/4/13/11333276/ash-carter-transcript.

[309] Rose Gottemoeller, "Statement Before the Senate Committee on Appropriations Subcommittee on Energy and Water Development," *State.gov*, July 13, 2016, available at http://www.state.gov/t/us/2016/260068.htm.

[310] Joe Biden, *U.S. Vice President Joe Biden on Nuclear Security*, Carnegie Endowment for International Peace, January 11, 2017, available at http://carnegieendowment.org/2017/01/11/u.s.-vice-president-joe-biden-on-nuclear-security-event-5476, cited in, Matthew Costlow, "The Myth of U.S. Nuclear Leadership," *RealClear Defense*, February 14, 2017, available at https://www.realcleardefense.com/articles/2017/02/15/the_myth_of_us_nuclear_leadership_110809.html.

[311] Telephone interview conducted on May 11, 2020.

[312] Telephone interviews conducted on April 22 and May 27, 2020.

[313] Telephone interview conducted on April 22, 2020.

Regrettably, the U.S. desire to set an example of restraint in nuclear developments for Russia to follow proved entirely unsuccessful. U.S. and Russian nuclear policies diverged significantly. While the United States sought to reduce the role of nuclear weapons in its national security strategy and to avoid an arms race, Russia continued its nuclear buildup. Neither the narrative that the United States was responsible for prompting Russia to adopt the course it took, nor the belief that U.S. restraint would be matched by Russia, or others, are supported by the historical record.

# Chapter X
# Moving Toward Nuclear Modernization in the Wake of a Return to Great Power Competition

*"The US and Russia are leading the way for a new nuclear arms race, one that will be even more dangerous and unpredictable than the one we narrowly escaped from during the cold war."*[314]

Today, the United States and the Russian Federation appear far apart in their respective approaches to nuclear weapons. As noted previously, the United States deferred strategic modernization decisions, discounted the threat posed by Russia, decreased the size of its nuclear arsenal, stopped explosive nuclear weapons testing, and de-emphasized the role of nuclear weapons in its national security strategy. By contrast, Russia moved in the opposite direction—increasing its nuclear arsenal, threatening neighbors with nuclear strikes, talking openly about the possibility of preemptive nuclear use, and accelerating the development of new and more sophisticated offensive nuclear weapons systems.

This reality was officially recognized by the Trump Administration in its 2017 *National Security Strategy* and its 2018 *National Defense Strategy*, both of which declared the re-emergence of great power competition (i.e., China and Russia) to be the greatest security threat to the United States. The *National Security Strategy* was explicit in describing the challenge, noting, "Russia seeks to restore its great power status and establish spheres of influence near its borders" in an attempt "to shape a world antithetical to U.S. values and interests." It further noted that "Russia is investing in new military capabilities, including nuclear systems that remain the most significant existential threat to the United States…."[315]

In February 2018, the Department of Defense released its *Nuclear Posture Review*. The NPR acknowledged Russia's reversion in recent years to a more aggressive nuclear stance, stating:

> While Russia initially followed America's lead and made similarly sharp reductions in its strategic nuclear forces, it retained large numbers of non-strategic nuclear weapons. Today, Russia is modernizing these weapons as well as its other strategic systems. Even more troubling has been Russia's adoption of military strategies and capabilities that rely on nuclear escalation for their success. These developments, coupled with Russia's seizure of Crimea and nuclear threats against our allies, mark Moscow's decided return to Great Power competition.[316]

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[314] Susi Snyder, *Producing Mass Destruction: Private Companies and the Nuclear Weapon Industry*, International Campaign to Abolish Nuclear Weapons, May 2019, p. 3, available at https://www.dontbankonthebomb.com/wp-content/uploads/2019/05/2019_Producers-Report-FINAL.pdf.

[315] The White House, *National Security Strategy of the United States of America*, December 2017, op. cit., pp. 25-26.

[316] Department of Defense*, Nuclear Posture Review*, February 2018, p. I, available at https://media.defense.gov/2018/Feb/02/2001872886/-1/-1/1/2018-NUCLEAR-POSTURE-REVIEW-FINAL-REPORT.PDF.

As a consequence, the Trump Administration's NPR proposed to proceed with the strategic modernization program first established by the Obama Administration, while supplementing it with two additional nuclear capabilities—deployment of a low-yield ballistic missile warhead in the near term and development of a new nuclear sea-launched cruise missile in the longer term. According to the administration, these supplemental capabilities "will enhance deterrence by denying potential adversaries any mistaken confidence that limited nuclear employment can provide a useful advantage over the United States and its allies."[317]

Critics of the administration's plan said it "will make the use of nuclear weapons more likely and undercut US security," arguing that it demonstrates the United States is "preparing for nuclear war-fighting."[318] Yet, in the words of the NPR:

> To be clear, this is not intended to, nor does it enable, "nuclear war-fighting." Expanding flexible U.S. nuclear options now, to include low-yield options, is important for the preservation of credible deterrence against regional aggression. It will raise the nuclear threshold and help ensure that potential adversaries perceive no possible advantage in limited nuclear escalation, making nuclear employment less likely.[319]

The two supplemental nuclear capabilities proposed by the Trump Administration are modest changes in the U.S. force. John Harvey noted these capabilities "make a lot of sense to me but are certainly not drivers of arms races."[320] The low-yield ballistic missile warhead has already been fielded on existing sea-launched ballistic missiles and has resulted in a *decline* in the overall destructive power of these weapons—hardly a condition associated with arms racing. The nuclear sea-launched cruise missile will take years to develop, but is not a "new" capability in that the United States had nuclear armed Tomahawk sea-launched cruise missiles in its inventory for decades before they were unilaterally retired by the Obama Administration. As one senior Defense Department official stated regarding the 2018 NPR, "Our response is reasonable in that it's dealing with what we thought were the key changes in the Russian threat, but in a way that doesn't start an arms race."[321] In addition, a bipartisan group of experts wrote in an op-ed on the 2018 NPR:

> Proposed changes to the U.S. posture in the 2018 NPR are modest and follow with substantial changes in global security since the 2010 report. These include, most importantly Russia's open contempt for the European security order, use of force to change borders as in the occupation of Crimea, nuclear first use threats to U.S. allies, decade-long modernization of nuclear weapons, continuing violation of the Intermediate-

[317] Ibid., p. XI.

[318] See for example, Lizbeth Gronlund, *Trump's Nuclear Posture Review: Top Take-Aways*, Union of Concerned Scientists, February 2, 2018, available at https://allthingsnuclear.org/lgronlund/trumps-npr-top-take-aways.

[319] Department of Defense*, Nuclear Posture Review*, February 2018, op. cit., p. XII.

[320] Telephone interview conducted on May 27, 2020.

[321] Justin Doubleday, "Ahead of hearings, DoD officials claim 'sensible' approach to nuclear modernization," *InsideDefense.com*, February 24, 2020, available at https://insidedefense.com/daily-news/ahead-hearings-dod-officials-claim-sensible-approach-nuclear-modernization.

Range Nuclear Forces (INF) Treaty, and the surging role of nuclear weapons in Russia's security posture.[322]

For its part, Russia has continued with its own long-standing nuclear modernization programs. In early 2018, Russian President Vladimir Putin announced with great fanfare that Moscow is developing at least five new sophisticated nuclear weapons delivery systems intended to counter U.S. military advantages, including U.S. missile defenses, accusing the United States of seeking to counter those weapons that "form the backbone of our nuclear deterrence forces."[323] Russian nuclear weapons programs have proceeded apace under an aggressive modernization effort that has included the building and deployment of new nuclear strike capabilities, both "strategic" and "theater." China, too, is engaging in an expansion of its nuclear capabilities.

Russia now argues that its development of new strategic nuclear systems—including a nuclear-armed torpedo, a hypersonic glide vehicle, and an air-launched medium-range missile—is a direct response to the U.S. withdrawal from the ABM Treaty nearly two decades ago. According to Russian Foreign Minister Sergei Ryabkov, "the primary reason for our work and success in creating these new systems lies precisely with the U.S. withdrawal from the ABM Treaty…. Had the United States not withdrawn from the ABM Treaty, now there would not be this situation with the new systems."[324] President Putin also declared that the U.S. ABM Treaty withdrawal was the impetus for Russia's new strategic programs: "During all these years since the unilateral US withdrawal from the ABM Treaty, we have been working intensively on advanced equipment and arms, which allowed us to make a breakthrough in developing new models of strategic weapons."[325] He also accused various U.S. administrations of working "to accelerate an arms race and seek unilateral advantage against Russia."[326]

Domestic critics of the Trump Administration's nuclear policies have echoed Moscow's assertions that Russian strategic developments are a response to U.S. missile defense programs in the absence of the ABM Treaty. For example, in a remarkable echo of what former UN Ambassador Jeanne Kirkpatrick described as a "blame America first" mentality, one critic recently argued, "Back then, U.S. experts (and Russia) warned that the consequences of killing the ABM Treaty would be a buildup of new Russian nuclear forces. And what we see now in Russia is exactly that: the development of a range of novel systems such as new heavy land-based missiles, nuclear-powered cruise missiles, and nuclear-tipped long-range torpedoes."[327] Some have characterized this as evidence of an action-reaction dynamic, with the United States having

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[322] John Harvey, et al., "Continuity and Change in U.S. Nuclear Policy," *RealClearDefense*, February 7, 2018, available at https://www.realcleardefense.com/articles/2018/02/07/continuity_and_change_in_us_nuclear_policy_113025.html.

[323] Vladimir Putin, *Presidential Address to the Federal Assembly*, March 1, 2018, available at http://en.kremlin.ru/events/president/news/56957.

[324] "Russian Foreign Ministry Reveals How US Helped Push Moscow to Create Hypersonic Weapons," *Sputnik*, April 17, 2020, available at https://www.spacewar.com/reports/Russian_Foreign_Ministry_Reveals_How_US_Helped_Push_Moscow_to_Create_Hypersonic_Weapons_999.html.

[325] Putin, *Presidential Address to the Federal Assembly*, op. cit.

[326] Ibid.

[327] Jon B. Wolfsthal, "Forget the Book. Bolton's Legacy Is a Nuclear Arms Race," *Foreign Policy*, June 24, 2020, available at https://foreignpolicy.com/2020/06/24/john-bolton-book-trump-nuclear-arms-race-russia-iran-north-korea/.

instigated the action (ABM Treaty withdrawal) leading to Russia's reaction (new strategic programs). Several analysts have warned of a spiraling arms race as a result, noting:

> The action–reaction dynamic between offensive and defensive capabilities cannot be ignored indefinitely. The systems Russia has developed to ensure that its offensive capabilities remain capable of overcoming U.S. defenses are now fueling alarm and, likely, the pursuit of additional offensive and defensive military capabilities by the United States and other countries. This destabilizing pattern will continue until the United States and Russia address the underlying factors that motivate this negative dynamic.[328]

This argument is a convenient and now-familiar one for those seeking to hold the United States responsible for Russian behavior; it is based on the proposition that absent U.S. missile defense deployment, Russia would not have proceeded with the buildup of its offensive nuclear programs, i.e., U.S. culpability. It is virtually identical to the (erroneous) arguments made in the 1970s during debate on the ABM Treaty. This type of criticism ignores the reality that Russian behavior has its own dynamics and is not simply reactive to U.S. first actions. Russia's own goals and motivations, some entirely different from and perhaps incompatible with those of the United States, contribute to its armament decisions.

Various reports, some of which have been noted earlier, document the different perspectives the United States and Russia take with respect to nuclear weapons and the role of such weapons in national security strategy. Several oral history participants challenged the notion that the United States is to blame for Russian nuclear developments by noting that the United States neglected strategic modernization for decades while Russia did not. As one interviewee put it, "we are not driving this, we are catching up." Amb. Robert Joseph stated, "There isn't a 'race'—or if there is, it's a Russia-China race against the United States while the United States is at the starting line."[329] Franklin Miller stated, "The Russian force is 80 to 90 percent new; our force is zero percent new."[330] Ashton Carter, former Secretary of Defense in the Obama Administration, made a similar observation when he stated, "During the past 25 years, the United States has made no major new investments in its nuclear forces, yet other countries have conducted vigorous buildups. This history does not support the contention that U.S. investments fuel the nuclear programs of others."[331]

The Trump Administration abided by the policy set by its predecessors, eschewing missile defenses directed against Russia's (and now China's) strategic forces. As the 2019 *Missile Defense Review* noted, "Our missile defense systems constitute a cornerstone of our efforts to deter a missile attack by a rogue state on the U.S." and "The United States relies on nuclear

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[328] Mark Melamed and Lynn Rusten, *Russia's New Nuclear Weapon Delivery Systems: Implications for New START, Future Arms Control, and Strategic Stability*, Nuclear Threat Initiative, November 2019, p. 7, available at https://media.nti.org/documents/NTI-Melamed-Rusten_FINAL.pdf.

[329] Telephone interview conducted on May 7, 2020.

[330] Telephone interview conducted on May 15, 2020.

[331] Statement of Ashton Carter, *Evaluating the Nuclear Posture Review* (Cambridge, MA: Harvard Kennedy School, Belfer Center for Science and International Affairs, Spring 2018), available at https://www.belfercenter.org/publication/evaluating-nuclear-posture-review.

deterrence to prevent potential Russian or Chinese nuclear attacks employing their large and technically sophisticated intercontinental missile systems."[332]

Mark Schneider, a long-time Department of Defense official whose career spanned multiple administrations, noted that unlike the U.S. missile defense program, which is directed against rogue state missile threats, Russia's ABM system is designed to counter U.S. missile threats.[333] This demonstrates the divergent approaches taken by Russia and the United States based on each side's different threat perceptions and further highlights the fallacy of the simplistic U.S.-led action-reaction narrative. Russia understands that U.S. missile defenses are incapable of defeating a large-scale Russian nuclear attack on the United States. Yet, as another interviewee, James Miller, noted, Moscow is concerned about what the United States might be capable of doing "20 years down the road."[334] John Harvey commented that some of Russia's current modernization program "would have [been] done anyway," while some "is based on a concern that the U.S. could rapidly upgrade a missile defense which is geared against North Korea to one that can counter a much more massive attack."[335] Russia's focus on armaments in response to its own goals and its perceptions of possible future U.S. threats illustrates again how a leadership's strategic culture affects its armaments programs, again invalidating the simplistic, mechanistic action-reaction dynamic that assumes a predictable response based on domestic critics' presumptions of how opponents will view U.S. programs and behave.

In the area of arms control, critics of the Trump Administration argued that the U.S. withdrawal from the INF Treaty, the announced withdrawal from the Open Skies Treaty, and the failure extend the New START Treaty, heralded the start of a new arms race with Russia. For example, one analysis stated, "With the collapse of the INF Treaty, the U.S. and Russia are now free to build and deploy this category of weapons, which would fall in line with their seeming determination to kick-start a new nuclear arms race."[336] This charge fails to acknowledge that Russia alone has been deploying "this category of weapons" for years—which was the expressed reason for U.S. withdrawal from the INF Treaty. Again, those who employ the action-reaction critique of U.S. behavior appear to regard opponents as benign cogs caught in a U.S.-led action-reaction dynamic.

Another analyst argued, "Walking away from New START next year could lead to another strategic nuclear arms race."[337] Still another argued that a failure to extend New START "will touch off—gradually at first, and then rapidly—an open-ended nuclear arms race that will exceed

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[332] Department of Defense, *Missile Defense Review*, 2019, pp. II, 8, available at https://media.defense.gov/2019/Jan/17/2002080666/-1/-1/1/2019-MISSILE-DEFENSE-REVIEW.PDF.

[333] Telephone interview conducted on May 19, 2020. Indeed, President Putin has bragged that Russia has the capability to defeat any U.S. missile defense system, calling Russia's new intercontinental-range hypersonic missile "invulnerable" to U.S. defenses. See Vladimir Putin, *Presidential Address to the Federal Assembly*, op. cit.

[334] Telephone interview conducted on April 22, 2020.

[335] Telephone interview conducted on May 27, 2020.

[336] *The INF Treaty's definitive collapse: dawn of a new nuclear arms race?*, International Campaign to Abolish Nuclear Weapons, August 2, 2019, available at https://www.icanw.org/the_inf_treaty_s_definitive_collapse_dawn_of_a_new_nuclear_arms_race.

[337] Brian L. Sittlow, *New START: The Future of U.S.-Russia Nuclear Arms Control* (New York: Council on Foreign Relations, January 28, 2020), available at https://www.cfr.org/in-brief/new-start-future-us-russia-nuclear-arms-control.

in risk and expense what we experienced during the Cold War."[338] And, President Trump's announcement on withdrawing from the Open Skies Treaty resulted in another commentary predicting a new U.S-led action-reaction arms race: "In short, we are being ramrodded into an unnecessary nuclear arms race by Cold War ideologues who improbably still occupy positions of influence, abetted by a president who doesn't much like treaties either and Cabinet secretaries who have no principles and are inclined to go along with whatever the boss says."[339]

This concern was echoed by the Science and Security Board of the *Bulletin of Atomic Scientists*, who advanced the "Doomsday Clock" to only 100 seconds to midnight, the closest it has come to "apocalypse" at any time in its history, even at the height of the Cold War. In part, this was done because "[U.S.] national leaders have ended or undermined several major arms control treaties and negotiations during the last year, creating an environment conducive to a renewed nuclear arms race." Such a situation, they argued, "will, if unaddressed, lead to catastrophe, sooner rather than later."[340] A 2020 article predicted, "under the likely scenario of a second Trump term, one should expect the United States to continue abrogating international regimes, and to further increase military expenditure, which in turn could trigger another arms race, reminiscent of the Cold War era."[341]

The notion that the United States is culpable for initiating a new spiral in the arms race stands reality on its head. U.S. actions—both in its nuclear programs and in its arms control approach—*were precipitated* by prior Russian offensive program activities and behavior, including Russian violations of numerous arms control agreements. Ironically, the United States is now being pressed by critics to pursue a policy of inaction in the expectation that this will lead to Russian inaction—when in reality it was largely Russian actions that have led the United States to respond, now and in the past. The critics' arguments suggesting that it is now incumbent upon the United States to prevent an arms race by failing to address Russian nuclear and arms control misbehavior not only lack historical credibility but reflect outdated Cold War thinking about the action-reaction arms race that was as demonstrably wrong and misleading then as it is today.

The *Bulletin's* Science and Security Board also took issue with the Trump Administration's arms control approach by asserting that "the United States has adopted a bullying and derisive tone toward its Chinese and Russian competitors."[342] In fact, as already noted, the INF Treaty was nullified by Russian cheating, which, in essence, reflected Russia racing to deploy prohibited intermediate-range missiles while the United States was not. Similarly, under the Trump Administration, the Open Skies Treaty fell victim to multiple Russian violations.[343]

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[338] Thomas Countryman, "Why Nuclear Arms Control Matters Today," *The Foreign Service Journal*, May 2020, available at https://www.afsa.org/why-nuclear-arms-control-matters-today.

[339] Fred Kaplan, "This Is Not a Good Time to Start a New Arms Race," *Slate.com*, May 22, 2020, available at https://slate.com/news-and-politics/2020/05/arms-race-open-skies-new-start.html.

[340] John Mecklin, ed., Science and Security Board, "2020 Doomsday Clock Statement," *Bulletin of the Atomic Scientists*, available at https://thebulletin.org/doomsday-clock/current-time.

[341] Sina Azodi, "New Challenges are Emerging in China," *The National Interest*, June 28, 2020, available at https://nationalinterest.org/feature/new-challenges-are-emerging-china-163557.

[342] Ibid.

[343] Department of State, *Adherence to and Compliance with Arms Control, Nonproliferation, and Disarmament Agreements and Commitments (Compliance Report)*, op. cit.

To date, the United States has refrained from engaging in an arms race with Russia, and various Trump Administration officials noted publicly that the United States was not seeking an arms race with either Russia or China.[344] Indeed, even some critics of U.S. nuclear posture have asserted that China will not follow U.S. reactions to Russia's disturbing nuclear and arms control behavior. As one stated, "If the United States moves forward with current plans to waste trillions on modernizing its nuclear arsenal, China is unlikely to follow" because "Chinese leaders believe that excess military spending, especially on the nuclear arms race with the United States, contributed to the collapse of the Soviet Union."[345] This hardly supports the U.S.-led action-reaction narrative propounded by other critics.

Emphasizing that all parties must comply with arms control agreements, as did the Trump Administration, can arguably *strengthen* the role arms control can play in contributing to U.S. national security: Allowing one side to cheat while the other remains in strict compliance destroys the integrity of the arms control process. As Douglas Feith, Under Secretary of Defense for Policy in the George W. Bush Administration commented, the U.S. failure to respond to Soviet arms control violations encouraged further violations by demonstrating to them that the cost of cheating was "extremely low."[346] This is an example of U.S. *inaction* leading to Russian action. The U.S. failure to hold the Soviet Union (and Russia) accountable for its years of arms control violations is what ultimately led to the breakdown of existing arms control regimes.

The action-reaction arms race metaphor has also been applied by critics to argue against U.S. actions perceived as inconsistent with other arms control obligations or political commitments. For example, speculation about the potential U.S. resumption of nuclear testing under the Trump Administration prompted one analyst to comment that such an action "won't just encourage Russia to test again; it will ensure that China, India and Pakistan resume testing too—and the world will be in far greater danger."[347] (In fact, the U.S. cessation of nuclear testing in 1992 did not dissuade China, India, or Pakistan from conducting their own nuclear tests subsequently.) Similarly, another critic argued that a resumption of U.S. nuclear testing would send a "signal" to other countries, "forcing them to do the same thing."[348] A former administrator of the National Nuclear Security Administration argued that a resumption of U.S. nuclear testing would give "a green light to other countries, including dangerous proliferators, to conduct nuclear tests of their own."[349] This was echoed by another commentator who predicted that U.S. nuclear testing would

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[344] See for example, *Transcript of Discussion with Special Presidential Envoy Marshall Billingslea on the Future of Nuclear Arms Control*, Hudson Institute, May 21, 2020, available at https://www.hudson.org/research/16062-transcript-special-presidential-envoy-marshall-billingslea-on-the-future-of-nuclear-arms-control.

[345] Gregory Kulacki, *China is unlikely to engage in a nuclear arms race with the US*, Quincy Institute for Responsible Statecraft, July 9, 2020, available at https://responsiblestatecraft.org/2020/07/09/china-is-unlikely-to-engage-in-a-nuclear-arms-race-with-the-us/?utm_source=rss&utm_medium=rss&utm_campaign=china-is-unlikely-to-engage-in-a-nuclear-arms-race-with-the-us.

[346] Telephone interview conducted on May 18, 2020.

[347] Scott Sagan, cited in Doyle McManus, "A bad move on nuclear arms: Trump's escalation plan is reckless, dangerous and unnecessary," *Los Angeles Times*, May 27, 2020, available at https://enewspaper.latimes.com/infinity/article_share.aspx?guid=c8c11908-dfd2-4047-9c67-f4b3094203ad.

[348] Kyle Mizokami, "America Should Never Conduct Another Nuclear Test," *Popular Mechanics*, May 27, 2020, available at https://www.popularmechanics.com/military/weapons/a32676737/us-nuclear-tests/.

[349] William Courtney and Frank Klotz, "Should the U.S. Really Be Testing Nukes Now?," *Newsweek*, June 10, 2020, available at https://www.newsweek.com/nuclear-tests-america-trump-now-1509868.

"likely trigger nuclear testing by other states, and set off a new nuclear arms race in which everyone would come out a loser."[350] Similarly, it was argued, "If the restart of nuclear testing is driven by a desire to demonstrate national strength, the renewed nuclear arms race it sets in motion will have the exact opposite impact."[351]

In a letter to then-President Trump, more than 80 Congressmen and Senators argued that a resumption of U.S. nuclear testing would "cause other countries to develop or acquire nuclear weapons, and prompt adversaries to respond in kind—risking a new nuclear arms race…."[352] Then-presidential candidate Joseph Biden asked at the time: "How can the United States persuade North Korea not to test and to give up its nuclear weapons, and how can we persuade Iran not to pursue nuclear weapons, if we set the destructive example of testing nuclear weapons for coercive purposes?.... A resumption of testing is more likely to prompt other countries to resume militarily significant nuclear testing, and undermine our nuclear nonproliferation goals."[353]

The issue of nuclear testing is a case in point that demonstrates how the decisions of other countries are based on their own goals and perceptions of national security, and not on actions taken (or not taken) by the United States as presumed by the action-reaction metaphor. The United States stopped all nuclear testing in 1992 and has strictly abided by a nuclear test moratorium since then. Despite the U.S. abandonment of nuclear testing, France conducted six nuclear tests in 1995 and 1996; China conducted eight nuclear tests from 1994 to 1996; and India conducted two nuclear weapons tests in 1998. The Indian tests were followed in short order by five simultaneous nuclear tests by Pakistan. Given the historical animosities and conflicts between these two regional powers, the nuclear tests by India and Pakistan were driven more by their own perceptions of regional threats and security needs than by U.S. actions.

More recently, North Korea entered the nuclear weapons club by conducting its own nuclear test in 2006. This was followed by subsequent nuclear tests in 2009, 2013, 2016, and 2017. Obviously, the U.S. commitment to refrain from nuclear testing did not encourage North Korea to follow suit; yet, critics now suggest with a degree of certitude that the opposite linkage holds true, i.e., that a resumption of U.S. nuclear testing will cause others to test as well. As Beatrice Fihn of the Campaign to Abolish Nuclear Weapons opined, U.S. testing "would blow up any chance of

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[350] Kimball, "Nuclear Arms Control, or a New Arms Race? Trump Seems Bent on the Latter," op. cit.

[351] Kelsey D. Atherton, "The United States Is Safest When All Nuclear Tests Are Virtual," *Slate.com*, July 9, 2020, available at https://slate.com/technology/2020/07/nuclear-testing-live-virtual-safe.html.

[352] Letter to President Trump, June 8, 2020, available at https://www.wyden.senate.gov/imo/media/doc/060820%20Wyden%20Foster%20Bicameral%20Nuclear%20Testing%20Letter%20.pdf.

[353] See, Megan Messerly, "Resuming U.S. nuclear testing, as Trump administration officials have reportedly discussed, would be 'as reckless as it is dangerous,' Biden says," *The Nevada Independent*, May 28, 2020, available at https://thenevadaindependent.com/article/resuming-u-s-nuclear-testing-as-trump-administration-officials-have-reportedly-discussed-would-be-as-reckless-as-it-is-dangerous-biden-says. Also see, "Biden calls Trump nuclear testing discussion reckless, dangerous," *Reuters*, May 28, 2020, available at https://www.reuters.com/article/us-usa-election-biden-nuclear/biden-calls-trump-nuclear-testing-discussion-reckless-dangerous-idUSKBN2342GK?feedType=RSS&feedName=politicsNews&utm_source=feedburner&utm_medium=feed&utm_campaign=Feed%3A+Reuters%2FPoliticsNews+%28Reuters+Politics+News%29.

avoiding a dangerous new nuclear arms race."[354] Such assertions conveniently ignore the role of opponents' self-driven goals and strategic culture in their decision-making calculus.

Other states, despite pledging not to conduct nuclear tests, are apparently doing so surreptitiously in ways to avoid detection. As the State Department's latest arms control compliance report states, "Russia has conducted nuclear weapons-related experiments that have created nuclear yield." These "supercritical" tests "raise concerns about Russia's compliance" with its obligations under the Threshold Test Ban Treaty. In addition, China's test activities "raise concerns regarding its adherence to the 'zero yield' standard adhered to by the United States, the United Kingdom, and France in their respective nuclear weapons testing moratoria."[355] This appears not to be a recent development. More than a decade ago the bipartisan Congressional Commission on the Strategic Posture of the United States expressed concern over "the activities underway at nuclear test sites in Russia, China, and elsewhere,"[356] with the Commission's report also noting, "Apparently Russia and possibly China are conducting low yield tests."[357]

Again, the critics' Cold War-type assertions of U.S. culpability in driving an action-reaction dynamic with respect to nuclear testing are clearly in error. In an era of renewed great power competition, evidence demonstrates that neither Russia nor China will be moved to moderation by the power of America's example of inaction when it comes to nuclear weapons. Rogue states also are likely to determine their own nuclear behavior based more on their own security considerations, including the desire to use nuclear weapons coercively, than on U.S. actions. As a contributor to this study has noted previously:

> [The] linkage of a potential U.S. nuclear initiative to the motivation of others to acquire nuclear weapons derives from the old action-reaction dynamic thought to drive the U.S.-Soviet nuclear arms competition during the Cold War…. Contending now that U.S. nuclear efforts will motivate rogue states to seek nuclear capabilities simply recasts and applies the action-reaction thesis to contemporary opponents and proliferation…. Rogue states seek nuclear capabilities for their own purposes, such as the ability to intimidate or attack their regional neighbors and to deter with nuclear threats an overwhelmingly strong U.S. conventional response to such actions. These nuclear aspirations do not require rogues to mimic U.S. nuclear programs qualitatively or quantitatively….[358]

Criticism of U.S. policies and programs based on the action-reaction presumption also is expressed by some foreign officials critical of U.S. nuclear modernization efforts. One member

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[354] Cited in, Conn Hallinan, "Tipping the Nuclear Dominoes," *Foreign Policy In Focus*, June 17, 2020, available at https://fpif.org/tipping-the-nuclear-dominoes/.

[355] Department of State, *Adherence to and Compliance with Arms Control, Nonproliferation, and Disarmament Agreements and Commitments (Compliance Report)*, op. cit., p. 49.

[356] William J. Perry and James R. Schlesinger, A*merica's Strategic Posture: The Final Report of the Congressional Commission on the Strategic Posture of the United States*, 2009, p. 14, available at https://www.usip.org/sites/default/files/America's_Strategic_Posture_Auth_Ed.pdf.

[357] Ibid., p. 83.

[358] Keith B. Payne, "The Nuclear Posture Review: Setting the Record Straight," *The Washington Quarterly*, Vol. 28, No. 3 (Summer 2005), pp. 135-151, reprinted in U.S. Nuclear Strategy Forum, "The Nuclear Posture Review: Setting the Record Straight" (Washington, D.C., 2005), p. 12, available at https://www.nipp.org/wp-content/uploads/2014/11/NSF-2.pdf.

of Germany's parliament has argued that the U.S. nuclear modernization program is spurring a new arms race that will "swallow up enormous amounts of money" and "provoke new dangerous threats that could have catastrophic consequences."[359] This argument was refuted by two former U.S. officials in the Obama Administration who noted that Russia's extensive nuclear arms buildup over the past fifteen years was "not because of the United States."[360]

What all of these criticisms have in common is a belief, driven by the action-reaction presumption, that it is the United States that is responsible for creating an arms race and the corollary inaction-inaction presumption that the United States can change the behavior of others by stopping its actions. Again, opponents are presumed to be benign cogs caught in a mechanistic action-reaction dynamic driven by the United States. For example, in a nod to the belief that the United States should set an example for the rest of the world in an effort to shape the decision making of other countries, former Senate Armed Services Committee Chairman Sam Nunn and former Secretary of Energy Ernest Moniz stated that "the United States should be leading the international community, cooperating with allies, and avoiding actions that could further destabilize the international environment."[361] While seeking cooperation and avoiding destabilizing behavior are proper U.S. goals, the action-reaction and inaction-inaction narratives provide guidance to those ends that is more misleading than enlightening.

**Summary**

In the context of an emerging great power competition that includes extensive Russian and Chinese nuclear and conventional force buildups, aggressive revisionist behaviors, and explicit nuclear threats to the U.S. and allies, the Obama Administration initiated a comprehensive nuclear modernization program. It was largely adopted by the Trump Administration, along with the addition of two modest supplemental nuclear capabilities. This is the first comprehensive U.S. nuclear modernization program since the Reagan build-up of the 1980's. In this contemporary threat context, both Russian and Chinese nuclear programs and geopolitical expansionism appear to play prominently in the renewed bipartisan U.S. threat perceptions that are driving U.S. nuclear modernization plans.

Nevertheless, in accord with Cold War action-reaction assertions, critics now contend that it is these late U.S. nuclear programs that will cause an arms race by prompting others to move forward with their own nuclear programs, i.e., U.S. culpability. The corollary argument, as usual, is that if the United States would now refrain from acting, opponents would do likewise, i.e., inaction-inaction. However, the historical evidence demonstrates that U.S. behavior did not cause Russian or Chinese nuclear and conventional force expansions. Rather, they are a reflection of Russian and Chinese internally driven, revisionist geopolitical goals and their strategies to support

[359] Rolf Mützenich, "Germany and nuclear sharing: In these critical times funds are limited and we must have a serious debate on every expense—including military expenses," *International Politics and Society*, May 7, 2020, available at https://www.ips-journal.eu/regions/europe/article/show/germany-and-nuclear-sharing-4362/.

[360] Peter Rough and Frank A. Rose, "Why Germany's nuclear mission matters," *Frankfurter Allgemeine Zeitung*, translated by Brookings Institution, June 9, 2020, available at https://www.brookings.edu/blog/order-from-chaos/2020/06/09/why-germanys-nuclear-mission-matters/.

[361] *Statement from Ernest J. Moniz and Sam Nunn on U.S. Withdrawal from the Open Skies Treaty*, Nuclear Threat Initiative, May 22, 2020, available at https://www.nti.org/newsroom/news/statement-ernest-j-moniz-and-sam-nunn-us-withdrawal-open-skies-treaty/.

those goals. The Obama and Trump Administrations' nuclear programs clearly were a reaction to the Russian and Chinese developments following years of U.S. quiescence. None of the oral history participants interviewed in connection with this study subscribed to the action-reaction critique of contemporary U.S. actions because it is so manifestly inconsistent with historical trends.

Russia has attempted to link its new strategic programs with U.S. missile defense activities; yet this primarily appears to be part of Moscow's campaign to undermine U.S. programs and not the result of an action-reaction dynamic led by the United States. Domestic critics of U.S. policy have also predicted that because of U.S. withdrawal from arms control agreements previously reached, the world will become more dangerous as opponents now feel free to develop or proceed with their own nuclear programs, including conducting nuclear tests and developing new nuclear weapons and delivery systems. However, opponents have been pursuing these behaviors in violation of agreements for many years—U.S. withdrawal from agreements under the Trump Administration was a response to their lack of compliance integrity.

The action-reaction argument of the 1960s continues to be employed today to assert U.S. culpability via the counterfactual assumption that the actions of others are benign responses to prior U.S. actions. As in the past, this frequent charge essentially ignores the unique security considerations that are the primary factors that drive the decision-making calculus of other states. Tellingly, it is the critics of U.S. policy employing the action-reaction argument who are mired in Cold War thinking.

In general, despite the pervasive notion in the arms control and disarmament community that the United States is driving others into a dangerous arms race in which there can be "no winners," and that U.S. inaction will inspire opponents' inaction, such projections are contrary to historical evidence and appear to be based on a set of presumptions derived from Cold War thinking that contradicts the historical record and that all of the oral history participants in this study have criticized as inaccurate and false.

# Chapter XI
# Conclusions and Lessons Learned

*"Plus ça change, plus c'est la même chose (The more things change, the more they stay the same)."*[362]

This study has assessed the action-reaction arms race metaphor in the context of multiple manifest and significant milestones and inflection points in U.S. strategic policy and force acquisition programs. Various triggers over decades include the continuous expansion of Soviet nuclear and conventional capabilities, aggressive Soviet geopolitical moves, the collapse of the Soviet Union and end of the Cold War, the subsequent proliferation of advanced technology and a return of great power competition that includes increasingly explicit nuclear threats to the United States and allies. These developments led the United States to reassess its strategic policies and force postures to sustain basic deterrence goals that have received bipartisan support and remained consistent over decades.

In many cases, developments in foreign nuclear policies and postures led U.S. policymakers to re-examine American nuclear policies and capabilities in an effort to preserve the credible functioning of deterrence, including extended deterrence. Other cases, including the Reagan SDI program and the subsequent U.S. deployment of limited homeland defense capabilities, reflected attempted revisions in U.S. policy priorities or a change in threats to the United States.

This study shows that the major changes, or inflection points, in U.S. policy from the end of the 1960s to the present day were accompanied by assertions that U.S. actions would start an arms race and make the world more dangerous, and that if the United States refrained from taking actions, i.e., inaction, others would follow suit. What the study demonstrates, however, is that neither prediction is consistent with the historical evidence. (A summary of the study's findings is shown in the below chart.)

[362] Attributed to French writer Jean-Baptiste Alphonse Karr.

| **Assertions and Facts Regarding the "U.S.-Led Action-Reaction Arms Race" Narrative** | |
|---|---|
| **Action-Reaction Arms Race Assertions** | **Facts** |
| 1960s-Present. Arms races are the result of U.S. actions that compel adversary reactions in response and instigate a U.S.-led "action-reaction arms race." Correspondingly, U.S. restraint (inaction) allows adversaries to avoid responsive armament, thus creating an inaction-inaction dynamic and precluding arms racing. U.S. action or inaction is the key factor in causing or preventing the arms race. | Adversary actions and armament decisions are determined by a variety of unique national considerations that reflect a multitude of strategic, cultural, geo-political, and other factors; they are not simply mechanistic reactions to U.S. action or inaction. Adversary armament decisions often are not in reaction to prior U.S. behavior nor will they necessarily be precluded by U.S. inaction. |
| Late 1960s-1972. The U.S. deployment of strategic missile defense will intensify the arms race and preclude arms control. In contrast, U.S. accession to the 1972 ABM Treaty will preclude both a Soviet nuclear offensive buildup and an arms race. | The greatest increase in Soviet nuclear offensive arms occurred *after* the signing of the ABM Treaty, along with continuing upgrades to the deployed Soviet nuclear-armed ABM system. |
| 1974. The U.S. 1974 "Schlesinger Doctrine" (NSDM-242) and related development of Limited Nuclear Options (LNOs) is another unnecessary, destabilizing U.S. nuclear initiative that will force the Soviets to respond with additional nuclear capabilities and thus cause an escalation of the arms race. | The Schlesinger Doctrine was not a cause of the continuing Soviet nuclear expansion, but a U.S. response to that expansion. It was a policy shift intended to preserve deterrence stability, particularly extended deterrence for allies, in the face of the continuing expansion of Soviet nuclear capabilities. As part of the Schlesinger Doctrine, the United States continued to deliberately restrain the number and types of its nuclear capabilities. |

| **Assertions and Facts Regarding the "U.S.-Led Action-Reaction Arms Race" Narrative** | |
|---|---|
| **Action-Reaction Arms Race Assertions** | **Facts** |
| 1980. The U.S. 1980 "Countervailing Strategy" (PD-59) is another unnecessary, destabilizing U.S. nuclear initiative that will force the Soviets to respond with additional nuclear capabilities and thus cause an escalation of the arms race. | The Countervailing Strategy was not a cause of the continuing Soviet nuclear expansion, but a consequence of that continuing expansion. it sought to ensure the continuing credibility of the U.S. nuclear deterrent and extended deterrent. While the Soviets sought to attain a strategic advantage over the United States, the United States did not deploy comparable offensive or defensive capabilities. |
| 1980s. The U.S. strategic nuclear buildup of the late Carter and Reagan Administrations is an unnecessary, destabilizing U.S. nuclear initiative that will force the Soviets to respond with additional nuclear capabilities and thus cause an escalation of the arms race. | The U.S. 1980s strategic modernization program was not a cause of the continuing Soviet nuclear expansion, but a consequence of that continuing expansion. The Carter and Reagan Administrations intended to bolster deterrence and ensure the survivability of U.S. retaliatory forces in light of Soviet strategic expansion. U.S. responses were *restrained* and *moderate* compared to Soviet efforts to attain strategic advantages for their own purposes. |
| Mid-1980s. U.S. deployment of INF systems in Europe is unwanted by European allies, will compel a Soviet armaments response, undermine arms control, and spark an arms race as the Soviet Union deploys more INF systems, like the SS-20. | U.S. deployment of INF in Europe was invited by European allies, a response to *the prior* Soviet deployment of hundreds of new INF systems and intended to preserve extended deterrence for NATO. It ultimately led to the 1987 INF Treaty that eliminated an entire class of delivery systems, including the Soviet SS-20. |

| **Assertions and Facts Regarding the "U.S.-Led Action-Reaction Arms Race" Narrative** | |
|---|---|
| **Action-Reaction Arms Race Assertions** | **Facts** |
| Early-mid 1980s. The U.S. Strategic Defense Initiative (SDI) will destabilize deterrence, compel the Soviet Union to respond with offensive armaments, preclude arms control, bankrupt the U.S. economy, intensify the arms race, and extend it to the "heavens." Ceasing the SDI will facilitate arms control. | The SDI was a *defensive* response to the unceasing Soviet strategic offensive buildup on-going since the 1960s. Its scaling back neither halted nor curbed the continuing Soviet build-up of offensive nuclear forces nor the continuing modernization of Soviet nuclear-armed missile defense forces. But the SDI's technological promise forced the Soviet Union to make trade-offs that led to reforms that contributed to the USSR's ultimate demise. |
| 2002. U.S. withdrawal from the ABM Treaty will compel Russia and others to increase their strategic offensive and defensive forces, result in a renewed arms race, and destroy chances for further arms control agreements. | The U.S. withdrawal from the ABM did not cause renewed arms racing. In fact, Russian President Putin said publicly at the time that U.S. withdrawal from the ABM Treaty did not constitute a threat to Russia, and the largest negotiated reduction of deployed strategic nuclear weapons in history coincided with the *U.S. withdrawal* and the announced deployment of an initial U.S. missile defense system. |
| Early 1990s-Present. U.S. strategic restraint (e.g., reductions, deferral of nuclear modernization, cessation of nuclear testing, etc.) will set an "example" that others will follow, including the potential for the global elimination of nuclear weapons. *These assertions are an extension of the expected inaction-inaction dynamic to be led by U.S. example*. | From early in the post-Cold War period, neither Russia nor China followed the U.S. lead toward reducing the role and number of nuclear weapons. In fact, Russian and Chinese strategic modernization accelerated, and their respective doctrines appear to have placed increasing importance on nuclear capabilities for deterrence and coercive purposes. During this period, North Korea developed, tested and deployed nuclear weapons. In addition, despite the end of U.S. nuclear testing in 1992, Russia reportedly has surreptitiously conducted nuclear tests that produce yield, and Chinese activities have sparked concern over its compliance with the "zero yield" testing standard. |

| **Assertions and Facts Regarding the "U.S.-Led Action-Reaction Arms Race" Narrative** | |
|---|---|
| **Action-Reaction Arms Race Assertions** | **Facts** |
| 2010-Present. The U.S. nuclear modernization program initiated by the Obama Administration and sustained by the Trump Administration is unnecessary, destabilizing and will lead to an unconstrained arms race. *These assertions are an extension of the action-reaction critique of U.S. programs that originated in the 1960s*. | The U.S. strategic modernization program is the first such comprehensive effort since the 1980s. It is intended to restore the U.S. nuclear infrastructure that has atrophied significantly since the end of the Cold War and sustain rapidly aging U.S. deterrence capabilities in the face of the continuing Russian, Chinese and North Korean nuclear buildups—which preceded the planned U.S. modernization program. The U.S. program will not increase the number of U.S. nuclear forces and is intended to demonstrate restraint. In the context of the U.S. modernization program, the United States and Russia resumed arms control talks. |

The United States has not been the first cause driver of an arms race, nor has U.S. restraint in nuclear developments been matched by others. The popular narrative of an action-reaction arms race dynamic led by the United States lacks integrity, yet it continues to be voiced without restraint as if it is a "law" of international relations. As Walter Pincus wrote in 1999, "Whatever the United States does, wherever its presence is felt, its actions don't occur in a vacuum. In the world of missiles, missile defenses, nuclear physics and nuclear politics, action-reaction is still the norm."[363]

The narrative of a "mindless" action-reaction arms race is not a new phenomenon. Nor did it originate with the emergence of the nuclear era and the start of the Cold War. Predictions of a mechanistic action-reaction dynamic pre-date recent history and are reflected in arguments over armaments building that date back centuries. For example, in the early 1900s, Great Britain, the world's preeminent naval power, was being challenged for naval dominance by Germany, France, and Russia. Germany, in particular, was on a course to supplant Britain as a dominant naval power, launching a program to build dozens of battleships. By 1902, British experts had concluded that "we have lost our [naval] superiority and are distinctly dropping to the rear."[364] The British government debated whether to build a faster vessel—the *Dreadnought*—and how many. Yet, many in Britain sought to avoid an arms race with Germany and argued against building more *Dreadnoughts*. As one authoritative account explained:

[363] Walter Pincus, "First Law of Nuclear Politics: Every Action Brings Reaction," *The Washington Post*, November 28, 1999, p. B2.

[364] Cited in Kenneth L. Moll, "Politics, Power, and Panic: Britain's 1909 Dreadnought 'Gap'," *Military Affairs*, Vol. 21 (Fall 1965), p. 431.

> There remained a sizable sentiment [in Britain] for reducing armaments…. In 1905 Britain had built four ships to Germany's two. When Britain decreased her program in 1906, Germany increased. In 1907 Britain further decreased her program while Germany increased once again. It took some British a little longer, but eventually most began to get the message.[365]

Those who saw danger in Germany's buildup were accused of "naval scare-mongering," with one British Cabinet member calling it the "diseased imagination of inferior minds."[366] However, as one historian recounted, the British "did not start the naval race: the Germans did in 1898." As another historian noted, "The British soon realized that it was useless to try to turn Germany aside from its purpose by abstaining from countermeasures. Reluctance to do so would obviously be taken only as weakness."[367] Clearly, Britain's desire to avoid an arms race with Germany by scaling back its own naval building plans went unreciprocated—another example of the fallacy of the inaction-inaction argument. A few short years later, World War I began.

This British-German example demonstrates that arms races are not mechanistic processes where the actions of one party automatically result in similar actions by another party. Armament decisions are based on a multitude of factors that drive the decisions of states, including unique historical, cultural, economic, and leadership characteristics. Britain's experience in the early 1900s is reminiscent of Harold Brown's statement when asked about Soviet activities: "When we build, they build; when we cut, they build."

In some cases, U.S. action or inaction was followed by adversary behavior that was precisely the opposite of what proponents of the action-reaction theory of arms racing predicted, including U.S. action that led to Soviet inaction, and U.S. inaction that led to Soviet action. For example, Ronald Reagan's Strategic Defense Initiative (SDI)—even though it was never fully realized—convinced Russia that the United States enjoyed a level of technological superiority that Moscow was unable to match and, as a number of oral history participants noted, helped bring about the end of the Cold War by forcing the USSR to adopt various economic and political changes that ultimately led to the Soviet Union's collapse. And, despite criticism based on the action-reaction metaphor, George W. Bush's withdrawal from the ABM Treaty and move to deploy missile defenses against rogue state missile threats coincided with an arms control treaty sought by Russia, the Moscow Treaty. It mandated the deepest reductions in strategic offensive nuclear arsenals of any such agreement. In other cases, U.S. inaction encouraged adversary actions, such as when the United States ceased deployment of strategic missile defenses under the ABM Treaty, thereby creating an opportunity (as stated explicitly by Soviet senior military leadership) for the Soviet Union to channel resources into the expansion of Soviet ICBM capabilities. The critics' action-reaction based prediction was that U.S. agreement to the ABM Treaty would instead render a continuing Soviet buildup in offensive nuclear capabilities unnecessary.

Clearly, there have been interactions in U.S and Soviet (and subsequently, Russian) armament programs. Yet, in no case does it appear that the United States has been the lead cause of an action-reaction arms race. The United States has focused on preserving its capacity for deterrence and extended deterrence in the face of rapidly expanding Soviet and more recently

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[365] Ibid., p. 437.

[366] Quoted in, Arthur J. Marder, *From the Dreadnought to Scapa Flow, Volume I: The Road to War, 1904–1914* (Annapolis, MD: Naval Institute Press, 1961), cited in ibid., p. 438.

[367] Leonard Wainstein, "The Dreadnought Gap," in Robert J. Art and Kenneth N. Waltz, eds., *The Use of Force: International Politics and Foreign Policy* (Lanham, MD: University Press of America, 1983), p. 154.

Russian strategic nuclear capabilities, theater nuclear, and conventional capabilities, and an aggressive, expansionist, anti-American foreign policy. And in the cases of the 1983 SDI and 2002 missile defense initiative, U.S. actions were not followed by the reactions predicted by critics based on the action-reaction metaphor.

While the United States believed that strategic nuclear "parity" with the Soviet Union would lead to a satisfied Soviet Union and its quiescence, the Soviets sought to attain a position of relative superiority over the United States in the area of nuclear capability, particularly in hard target counterforce capability. And, in contrast to much U.S. behavior, the Soviets also actively sought strategic force advantages that would allow them to fight and win a nuclear war should deterrence fail. Nuclear developments on both sides can be attributed to interactions based more on these different perceptions and motivations than to the presumed mechanistic action-reaction dynamic.

Unlike the United States, which placed a premium on deterrence of nuclear attack through mutual possession of a credible, second-strike retaliatory capability, the Soviet approach to strategic doctrine placed a premium on deploying strategic and theater capabilities to prevail in the event of war. It is now evident that while the United States developed its nuclear posture largely to secure the benefits of a stable balance of terror and extended deterrence, the Soviets placed primacy on developing and deploying counterforce nuclear capabilities comprehensively to target U.S. retaliatory forces and various defensive capabilities to limit damage from potential U.S. retaliatory strikes. The Soviet and U.S. approaches to their respective nuclear force postures reflected their divergence of views on the primary utility of nuclear weapons: their armament programs were driven by the requirements that corresponded to their divergent goals, not by an action-reaction dynamic associated with mutual adherence to a "stable" balance of terror. A presumption of the latter was the basic fallacy of the simplistic action-reaction arms racing paradigm. As a Joint Net Assessment concluded:

> These fundamental differences between U.S. and Soviet strategic thought are reflected in the asymmetric force postures of the two sides. Because the Soviets regard nuclear war as a continuing possibility and have rejected mutual vulnerability as a desirable or permanent basis for the U.S.-Soviet strategic relationship, they seek superior capabilities to fight and win a nuclear war with the United States and have been working to improve their chances of prevailing in such a conflict.[368]

The Soviets developed and deployed a range of counterforce systems, including the large, heavily-MIRVed SS-18 ICBM, which correspondingly created a growing asymmetry in prompt counterforce capabilities. As the Department of Defense concluded: "The Soviets recognize the catastrophic consequences of global nuclear war. Nonetheless, they seek to survive and prevail in such a conflict."[369] And:

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[368] Secretary of Defense and Director of Central Intelligence, *US and Soviet Strategic Forces*, Joint Net Assessment, November 14, 1983, p. 8, available at https://nsarchive2.gwu.edu/NSAEBB/NSAEBB428/docs/1.US%20and%20Soviet%20Strategic%20Forces%20Joint%20Net%20Assessment.pdf.

[369] Department of Defense, *Soviet Military Power*, March 1987, p. 15, available at http://insidethecoldwar.org/sites/default/files/documents/DoD%20-%20Soviet%20Military%20Power%201987.pdf.

> If a war escalates to the nuclear level, Soviet doctrine calls for the massive use of nuclear weapons to preempt an imminent, large-scale enemy attack…. Following nuclear exchanges, the Soviets anticipate that combat at all levels would continue, possibly for a protracted period.[370]

If the expectation of an action-reaction arms race now leads to limits on U.S. strategic missile defenses--as occurred in the 1960s and 1970s, e.g., the 1972 ABM Treaty--there will likely be a significant trade-off that the United States did not face in the 1960s and 1970s. As rogue strategic missile capabilities expand and mature, limiting U.S. strategic missile defense now for fear of an action-reaction dynamic with Russia will likely leave the U.S. vulnerable to rogue missile strikes.

Since the end of the Cold War, U.S. policy on a bilateral basis has declared that U.S. vulnerability to rogue missile attack is an intolerable security condition for the United State and allies. The dilemma the United States will face is whether to expand its strategic missile defense capabilities to keep pace with rogue threats, or, in the expectation of an action-reaction dynamic, to reimpose limits on its strategic missile defense to try to preclude whatever additional Russian or Chinese forces those defenses might inspire. The United States pursued the ABM Treaty in part to avoid such an expected action-reaction interaction with the Soviet Union but withdrew from that Treaty three decades later for the purpose of deploying defenses against the rogue missile threat. The ABM Treaty limiting U.S. defenses ultimately did not lead to the expected Soviet moderation but did leave the United States vulnerable to the limited rogue missile threat that emerged in the post-Cold War era. The question the United States will likely face is whether a possible action-reaction dynamic with great powers or acquiescing to vulnerability to rogue missile attack is the priority security concern.

This study, which builds on the outstanding arms race analyses of Colin Gray and Albert Wohlstetter from the 1970s, concludes that in light of historical developments, arguments about the United States initiating or driving an arms race by virtue of its own nuclear modernization programs are not only wrong but reflect an ideological predisposition to posit U.S. culpability for arms racing. Assertions have remained constant over decades that U.S. nuclear weapons programs are the cause of arms racing and that U.S. restraint will be followed by opponent restraint. These assertions appear largely to be politically inspired speculation that contradicts available empirical evidence. As the legendary New York Yankees manager Yogi Berra once stated, "It's tough to make predictions, especially about the future."

Moreover, implicit in the U.S.-led action-reaction arms race theory is an assumption that other governments are either unwilling or incapable of deciding for themselves what their own national security requires, and simply react to U.S. developments. The belief that the United States sets the scope, pace, and direction of others' armament activities, and that the power of U.S. strategic restraint will guide others similarly, reflects a form of cultural arrogance that is unsupported by the historical record.

At least for the United States, the metrics for judging whether the United States is "racing" all suggest the opposite. While Russia, China, and North Korea have been pursuing nuclear building programs for two decades, the number of nuclear weapons in the U.S. stockpile today stands at its lowest level since the mid-1950s. The United States has not built a new nuclear weapon in

[370] Ibid., pp. 17-18.

decades and has not tested a nuclear weapon explosively in more than a quarter century. The level of investment in U.S. nuclear forces is at historical lows and will remain a single digit percentage of the overall U.S. defense budget even when the current modernization program reaches its peak. And the United States continues to focus on the development of advanced conventional weapons technologies in support of the goal of reducing the role of nuclear weapons in U.S. national security strategy. None of these developments are consistent with the publicly espoused notion of U.S.-led "arms racing."

As the issue of U.S. nuclear policy and programs continues to generate controversy, it is important to ensure that the public debate is informed by facts and data, not politically driven speculation and posturing. Recent assertions that the United States is "jumpstarting the 21st century arms race" because "arms races are good for business"[371] are not only polemical and inaccurate, but are dismissive of the complex dynamics of international relations that govern a state's armaments behavior—dynamics which were expertly explained by Colin Gray in the 1970s.[372] The goal of this study is to help contribute to an informed public debate, presenting the historical record and applying the lessons of history to contemporary circumstances. Understanding the reasons behind historical trends and drivers of U.S. actions is a necessary prerequisite for the development of sound policy today.

It is ironic that even today, despite repeated evidence to the contrary, critics of current-day nuclear modernization programs cite the same time-worn and inaccurate U.S.-led action-reaction arms race arguments that were advanced by those opposed to U.S. e programs in every decade since the 1960s.

The study authors are under no illusion that the historical evidence presented here will end the promulgation of the simplistic and discredited action-reaction arms race narrative by those who seek to move the United States away from nuclear deterrence and strategic defense capabilities altogether. As one oral history participant noted with regard to the action-reaction metaphor, "If you say something often enough, people will believe it."

Hopefully, however, this study will contribute to the understanding of those who seek an honest discussion of nuclear weapons policies and programs, informed by the lessons of history. We owe this to ourselves and to future generations that are unlikely to step out of the nuclear shadow.
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[371] Matt Korda, The Trump Administration Is Using The Pandemic To Ignite The Arms Race," *Forbes*, June 22, 2020, available at https://www.forbes.com/sites/matthewkorda/2020/06/22/the-trump-administration-is-using-the-pandemic-to-ignite-the-arms-race/#17e513f53dc9.

[372] See for example, Gray, *The Soviet-American Arms Race*, op. cit.

# Appendix
# List of "Oral History" Interviews

- *Fritz Ermarth, former Chairman of the National Intelligence Council and staff of the National Security Council during the Carter and Reagan Administrations*

- *The Hon. Douglas J. Feith, Former Under Secretary of Defense for Policy, former Deputy Assistant Secretary of Defense for Negotiations Policy*

- *The Hon. William R. Graham, former Chairman of the EMP Commission and former Director of the White House Office of Science and Technology Policy during the Reagan Administration*

- *Dr. John Harvey, former Principal Deputy to the Assistant Secretary of Defense for Nuclear, Chemical and Biological Defense Programs; Director, Policy Planning Staff of the National Nuclear Security Administration during the H. W. Bush Administration*

- *Amb. Robert G. Joseph, Former Under Secretary of State for Arms Control and International Security, former U.S. Commissioner to the Standing Consultative Commission*

- *Amb. Ron Lehman, Counselor to the Director, Lawrence Livermore National Laboratory; Director of the U.S. Arms Control and Disarmament Agency from 1989 to 1993*

- *The Hon. Franklin Miller, Principal, Scowcroft Group; former Special Assistant to President George W. Bush; Senior Director for Defense Policy and Arms Control, National Security Council; former senior OSD/Policy official for over two decades*

- *The Hon. James Miller, Senior Fellow, Belfer Center for Science & International Affairs, Harvard Kennedy School; former Under Secretary of Defense for Policy during the Obama Administration*

- *The Hon. Richard Perle, Assistant Secretary of Defense for International Security Policy during the Reagan Administration; Former Senior Staff Member to Senator Henry "Scoop" Jackson*

- *The Hon. John C. Rood, Former Under Secretary of Defense for Policy, Acting Under Secretary of State for Arms Control and International Security, and Assistant Secretary of State for International Security and Nonproliferation*

- *The Hon. Frank Rose, Senior Fellow for Security and Strategy, Brookings Institution; Assistant Secretary of State for Arms Control, Verification, and Compliance during the Obama Administration*

- *Dr. Mark B. Schneider, Former DoD Principal Director for Forces Policy, former Principal Director for Strategic Defense, Space and Verification Policy, and former Director for Strategic Arms Control Policy.*

- *The Hon. William Schneider, Senior Fellow, Hudson Institute and Member, Defense Science Board; former Chairman of the Defense Science Board, and Under Secretary of State*

- *Dr. Richard Wagner, Assistant to the Secretary of Defense for Atomic Energy during the Reagan Administration*

Interviewees provided their recollections of events. The findings in this study do not necessarily reflect their views. The views expressed in this monograph are the authors' alone and no not represent any institution with which they are or have been affiliated.

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**Dr. Keith B. Payne** is co-Founder of the National Institute for Public Policy, a nonprofit research center located in Fairfax, Virginia and professor emeritus, Missouri State University. Dr. Payne has served in the Department of Defense as the Deputy Assistant Secretary of Defense for Forces Policy and as a Senior Advisor to the Office of the Secretary of Defense (OSD). He received the Distinguished Public Service Medal and the OSD Award for Outstanding Achievement. In 2005, he was awarded the Vicennial Medal from Georgetown University for his many years on the faculty of the graduate National Security Studies Program. Dr. Payne also served as a Commissioner on the bipartisan Congressional Commission on the Strategic Posture of the United States, as a member of the Secretary of State's International Security Advisory Board, and as a member of U.S. Strategic Command's Senior Advisory Group. Dr. Payne is an award-winning author, coauthor or editor of 40 published books and monographs and more than 200 published articles and book chapters. His most recent book is entitled, *Shadows on the Wall: Deterrence and Disarmament*, National Institute Press, 2020.