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EDITOR'S NOTE

Welcome to the second issue of the *Journal of Policy & Strategy* in 2025. This issue is dedicated to the late Dr. John S. Foster Jr., who passed away recently at the age of 102. A national treasure, Dr. Foster (known as “Johnny”) was a brilliant mind, a former head of Lawrence Livermore National Laboratory, and served in the Department of Defense under two presidents and four Secretaries of Defense. Dr. Foster’s work drove the development of every nuclear weapon in the U.S. nuclear arsenal today. He was truly an intellectual giant—contributing uniquely to creating and sustaining the nuclear deterrence tools that have enforced great power peace for the past 80 years.

This issue begins with a Special Feature in our Analysis section by Matthew R. Costlow on *Detering the New Pacing Threats: Opportunistic and Coordinated Aggression*. The analysis considers the risks posed by U.S. adversaries including Russia and China to U.S. and Western security. It draws on lessons learned from the historical examples of the Korean conflict and the Cuban Missile Crisis to highlight a series of recommendations for deterring opportunistic and coordinated aggression in today’s volatile and dangerous international strategic environment.

The Analysis section also contains articles that address contemporary regional and security issues. Christopher Ford offers an assessment of the motivations behind Russia’s nuclear posturing, comparing modern Russian thinking about nuclear weapons to that of the Putin regime’s Soviet predecessors. Stephen Blank discusses the current violence by the Iranian-backed Houthis in Yemen against Red Sea shipping and proposes approaches to restore deterrence and freedom of navigation in the region. And Wannes Verstraete assesses the security implications of the emerging “tripolar nuclear order.”

This issue’s Interviews section features an interview with Thomas Scheber, former Director of Strike Policy and Integration in the Office of the Secretary of Defense, who comments on the importance of modernizing the U.S. nuclear enterprise; the challenges of producing new nuclear warheads; and the need to prioritize implementation of the recommendations in the Strategic Posture Commission’s report.

The Proceedings section highlights panel presentations from two National Institute for Public Policy webinars in February and March 2025. Luke Coffey, Michaela Dodge, Marek Menkiszak, and Martin Kroupa discuss Russia’s full-scale invasion of Ukraine after three years of conflict. Michael Rühle and Robert Joseph consider next steps in homeland missile defense in light of President Trump’s directive for a “Golden Dome” to protect the United States from missile attacks.

The Literature Review section looks at three recent publications: Robert Soofer’s (et al.), *“First we will defend the homeland”: The case for homeland missile defense*; James H. Anderson’s and Daniel R. Green’s (eds.), *Confronting China: US Defense Policy in an Era of Great Power Competition*; and Sergey Radchenko’s, *To Run the World: The Kremlin’s Cold War Bid for Global Power*.

The Documentation section includes congressional testimony from General Anthony Cotton, Commander, United States Strategic Command and General Stephen N. Whiting, Commander, United States Space Command. It also contains remarks by NATO Secretary General Mark Rutte and U.S. Vice President JD Vance. And, there are select excerpts from *International Security and Estonia 2025*, published by the Estonian Foreign Intelligence Service.

Finally, the From the Archive section features two documents: The Executive Summary from a 2015 National Institute report by Thomas K. Scheber and the late John R. Harvey, *Assessment of U.S. Readiness to Design, Develop and Produce Nuclear Warheads: Current Status and Some Remedial Steps*; and the Executive Summary from a 2017 National Institute Report by Keith B. Payne and the late John S. Foster Jr. (et al.), *A New Nuclear Review for a New Age*.

As always, we hope you, the readers, find this issue of the *Journal of Policy & Strategy* informative and useful.





ANALYSIS

The following articles are adapted from Matthew R. Costlow, *Detering the New Pacing Threats: Opportunistic and Coordinated Aggression* (Fairfax, VA: National Institute Press, March 2025), *Occasional Paper*, Vol. 5, No. 3, available at <https://nipp.org/wp-content/uploads/2025/04/Vol.-5-No.-3.pdf>. They are condensed and slightly modified versions of the *Occasional Paper* text that summarize the most relevant points for policymakers and analysts today concerning the nature of the threats of opportunistic and coordinated aggression, how U.S. officials have countered similar threats in the past, and how the United States should adapt its military forces in the future based in part on lessons learned from the Cold War. Those seeking a fuller historical treatment of the case studies are encouraged to read the relevant sections in the *Occasional Paper*.

RETHINKING THE PACING THREATS

The current threat environment is worsening so rapidly that the bipartisan consensus surrounding China as the new “pacing threat” now severely underplays the extent and severity of challenges facing the United States and its allies.¹ China, Russia, North Korea, and Iran all see the United States and its allies as adversaries—roadblocks in their pursuit of hegemonic aims. Rather than challenging the United States and its allies each on their own, China, Russia, North Korea, and Iran are strengthening their political, military, and economic ties. These growing ties, and the opportunistic nature of the leadership regimes, greatly increases the risks of simultaneous or sequential aggression against the United States and its allies. By working together, or even projecting the image of potential cooperation, these adversaries can minimize the risk that an unprepared and overstretched United States will be willing and able to come to its allies’ aid in a regional conflict while at the same time deterring aggression in a geographically distant second theater.

In short, adversaries of the United States and its allies may believe threatening opportunistic or coordinated aggression will be the strategy most likely to succeed: one that minimizes the costs and risks to them and multiplies the costs and risks to the United States. Local military superiority may be a condition that tempts adversaries to contemplate aggression, but how much more advantageous might their local military superiority appear when they know the United States is unprepared to fight and win in two distant, and distinct, geographic theaters sequentially—much less simultaneously?

Yet, since the United States has chosen to size its conventional forces and transport capabilities for less than a two-theater major war construct, the following question naturally arises: how could the U.S. nuclear arsenal contribute to deterring opportunistic and

¹ U.S. Department of Defense, *Summary of the 2018 National Defense Strategy of the United States of America* (Washington, D.C.: Department of Defense, 2018), p. 6, available at <https://dod.defense.gov/Portals/1/Documents/pubs/2018-National-Defense-Strategy-Summary.pdf>; and, U.S. Department of Defense, *2022 National Defense Strategy of the United States of America* (Washington, D.C.: Department of Defense, 2022), p. 17, available at <https://media.defense.gov/2022/Oct/27/2003103845/-1/-1/1/2022-NATIONAL-DEFENSE-STRATEGY-NPR-MDR.PDF>.



coordinated aggression? This question, however, is not limited to second theater considerations alone. Indeed, how the United States postures, signals with, and potentially employs nuclear weapons in a conflict against one adversary could positively affect the deterrence calculations of the second adversary contemplating opportunistic aggression. Conversely, U.S. failures—whether in strategy, capabilities, or resolve—will compound the dangers in both theaters.

Should the United States fail to deter opportunistic or coordinated aggression from its two peer adversaries in China and Russia, or even their two regional partners in North Korea and Iran, the consequences will quite likely not be limited to those two theaters alone—important as they are. Indeed, the United States and its allies could face the total collapse of their structure of alliances and the economic and security benefits associated with it. Yet, they have still been slow to respond.

U.S. defense officials and policymakers, therefore, face a stark three-part task: understanding adversaries' strategies, capabilities, and political will; grasping how the United States compares to its adversaries in those same factors; and, calculating how mismatches between adversary actions and U.S. counters can create the conditions for opportunistic or coordinated aggression. In other words, U.S. and allied officials must understand that there is likely a strong correlation between failing to properly tailor and support a deterrence strategy against opportunistic and coordinated aggression and the likelihood of those threats occurring. Unlike the Cold War, in which the United States faced only one peer adversary, the emerging threat environment features two peer U.S. adversaries, China and Russia, plus their regional partners North Korea and Iran, and failure to deter one may lead to a failure to deter others. In this new threat environment, U.S. mistakes or inadequacies are doubly dangerous.

The problems of opportunistic and coordinated aggression, and how the United States can deter them, have grown increasingly relevant in U.S. policymaking mainly for two reasons: China's and Russia's proclaimed "friendship without limits" that is morphing into a growing entente with North Korea and Iran; and, the overtly aggressive foreign policy goals of Beijing and Moscow—even setting aside their growing partnership—backed by their expanding nuclear forces.² Multiplying these threats, the United States is dangerously unprepared to counter these emerging challenges. As the congressionally mandated bipartisan 2023 Strategic Posture Commission concluded, the United States does not have sufficient conventional or nuclear capabilities to deter opportunistic or coordinated aggression in the future—and this deficiency can "have the perverse effect of making such aggression more likely."³ Correspondingly, U.S. policymakers face stark choices about the

² "Joint Statement of the Russian Federation and the People's Republic of China on the International Relations Entering a New Era and the Global Sustainable Development," *Kremlin.ru*, February 4, 2022, available at <http://www.en.kremlin.ru/supplement/5770>.

³ Madelyn R. Creedon and Jon L. Kyl, Chair and Co-Chair, *America's Strategic Posture: The Final Report of the Congressional Commission on the Strategic Posture of the United States* (Washington, D.C.: Senate Armed Services Committee, 2023), p. 8, available at https://www.armed-services.senate.gov/imo/media/doc/americas_strategic_posture_the_final_report_of_the_congressional_commission_on_the_strategic_posture_of_the_united_states.pdf; The 2024 National Defense Strategy Commission makes a similar point

need to increase topline defense spending to accommodate the growing deterrence requirements caused by the threats of opportunistic and coordinated aggression. Should they choose not to make those investments, or invest too slowly, then the United States may need to rely more heavily on its existing nuclear arsenal to deter such aggression—a point made by the Strategic Posture Commission, the 2022 *Nuclear Posture Review*, and other analyses.⁴

This rapidly converging set of threats should cause U.S. and allied officials to ask three fundamental questions: first, what makes the threats of opportunistic or coordinated aggression unique?; second, how has the United States approached these types of threats in the past?; and third, what relevant lessons are there from history that can apply to today? This set of articles has a structure that mirrors the same approach. The second article examines why the threats of opportunistic and coordinated aggression are more than just the sum of threats from individual states like China and Russia—and how these threats are made worse by U.S. and allied inaction. The third and fourth articles utilize two case studies, the Korean War and the Cuban Missile Crisis, respectively, to highlight the kinds of policy, strategy, and operational difficulties that the threat of opportunistic aggression poses to U.S. political and military leaders. Finally, the fifth article summarizes and applies the lessons U.S. policymakers should learn from history by recommending a concrete set of actions.

One simple but revealing insight pervades this study and should be at the forefront of U.S. and allied thinking on these topics: every decision made in the effort to deter and defeat opportunistic or coordinated aggression is over higher stakes than a conflict involving only two opposing states. That is, the geographically dispersed nature of the threat of opportunistic and coordinated aggression means that each U.S. and allied decision in one theater will have direct and indirect effects on the second theater, and vice versa. Threats, actions, victories, and defeats in one theater will potentially change in real time the dynamics and prospects in the second theater. At the risk of oversimplification, imagine a gambler facing the “double or nothing” dilemma. Swift victory in one theater may reduce the risk of adversary aggression in a second theater, but pursuing victory in one theater may use resources needed for deterrence in the second theater, leading to a Pyrrhic victory in one theater at the cost of another.

There are no iron laws of history that offer a roadmap for U.S. and allied policymakers at this critical juncture. U.S. history in the atomic era however, does offer some general insights into the nature of opportunistic and coordinated aggression, the difficulties these threats

regarding U.S. conventional forces. See, Jane Harman and Eric Edelman, Chair and Vice Chair, *Commission on the National Defense Strategy* (Washington, D.C.: RAND, July 2024), p. 37, available at <https://www.rand.org/nsrd/projects/NDS-commission.html>.

⁴ Ibid., p. 31; U.S. Department of Defense, *2022 Nuclear Posture Review*, op. cit., p. 12; and, Brad Roberts, Study Group Chair and Director, *China's Emergence as a Second Nuclear Peer* (Livermore, CA: Center for Global Security Research, Spring 2023), p. 70, available at https://cgsr.llnl.gov/content/assets/docs/CGSR_Two_Peer_230314.pdf; and, Greg Weaver, “Part I: US Deterrence Requirements in the Coming Two Nuclear Peer Threat Environment,” chapter in, Greg Weaver and Amy Woolf, *Requirements for Nuclear Deterrence and Arms Control in a Two Nuclear Peer Threat Environment* (Washington, D.C.: Atlantic Council, February 2, 2024), p. 10, available at https://cgsr.llnl.gov/content/assets/docs/CGSR_Two_Peer_230314.pdf.

present even to a well-prepared military, and the policies and strategies that aided U.S. policymakers in analogous situations in the past. Given the unprecedented nature of the emerging two nuclear peer threat environment and the sluggish U.S. and allied response, time is of the essence and knowledge is at a premium. These articles seek to aid in some small way U.S. and allied efforts to counter the magnitude of these immediate threats with a response that is equal to the moment.

OPPORTUNISTIC AND COORDINATED AGGRESSION TODAY: GREATER THAN THE SUM OF THEIR PARTS

Although one of the main contentions of this article is that the threats of opportunistic and coordinated aggression are greater than simply adding together the threats of China, Russia, etc., a study of opportunistic and coordinated aggression must necessarily begin with analysis of those individual states. The unique characteristics of each state, in fact, are what give rise to the possibility, even likelihood, of sequential or simultaneous aggression by one or more of them in theaters that are potentially thousands of miles apart.

People's Republic of China

The Chinese Communist Party (CCP) has chosen to leave behind former leader Deng Xiaoping's preference for China to "hide our capacities and bide our time"—instead, opting for a sprint to achieve a "world class military" by 2049.⁵ PRC leaders appear optimistic, at least outwardly, that China is well-positioned to take advantage of what they perceive as a declining United States. As summarized by the U.S. Department of Defense: "PRC leaders continue to believe that global trends, especially the perceived U.S. decline, are generally conducive to their long-term interests and, at the close of 2023, saw the 'new period of turbulence and transformation' as 'posing new strategic opportunities' in China's development."⁶ China's aggressive foreign policy is on display almost daily in the South China Sea and around Taiwan as evidenced by the growing number of dangerous intercepts of military and civilian craft at sea and in the air. China's leaders, for their part, have stated publicly and repeatedly that they will not renounce the use of force to decide the outcome of a "unification" effort to bring Taiwan under CCP rule.⁷ This belligerent foreign policy is

⁵ U.S. Department of Defense, *Military and Security Developments Involving the People's Republic of China 2024* (Washington, D.C.: Department of Defense, 2024), pp. 3, 5, available at <https://media.defense.gov/2024/Dec/18/2003615520/-1/-1/0/MILITARY-AND-SECURITY-DEVELOPMENTS-INVOLVING-THE-PEOPLES-REPUBLIC-OF-CHINA-2024.PDF>.

⁶ *Ibid.*, p. 2.

⁷ U.S. Department of Defense, *Military and Security Developments Involving the People's Republic of China 2023*, op. cit., p. 136.

supported by People's Liberation Army (PLA) writing that emphasizes the need to seize opportunities during a crisis. Indeed, without using the words "opportunistic aggression," many PLA writings suggest "... leaders may use a crisis situation as an opportunity to further other political or economic goals that have previously seemed out of reach or especially costly."⁸

As part of China's effort to build a "world class military" that could enable opportunistic or coordinated aggression, its recent rapid expansion of its nuclear forces stands out as one of the most consequential undertakings.⁹ The speed and scale of China's nuclear breakout extends to all areas of its enterprise, including the delivery systems, warheads, and related infrastructure. The Department of Defense's annual China military report noted in both 2022 and 2023 that China's nuclear expansion had exceeded its previous projections—indicating China's ability to rapidly alter its force posture and capabilities on a large scale.¹⁰ The Department of Defense expects China to have over 1,000 operational nuclear warheads by 2030, and perhaps reach rough numerical parity with the United States in deployed nuclear warheads by 2035.¹¹ When combined with its drastic expansion in anti-access/area denial capabilities, regional missiles, and long-range strike systems, China presents a still-growing and revisionist threat to the United States and its allies in the Indo-Pacific.

Russian Federation

Russian President Vladimir Putin's foreign policy is the embodiment of opportunism and aggression. Georgia in 2008, Ukraine in 2014, and Ukraine again in 2022, have been the most recent victims of outright Russian military aggression, although much of Europe has suffered the effects of Russian actions below the level of war, including information operations, cyber attacks, and industrial sabotage.¹² Russia seems willing to partner with any state that can aid it in achieving its territorial ambitions, including China, North Korea, and Iran. Perhaps more concerning are the costs the Kremlin is willing to pay to achieve its objectives. Since 2022,

⁸ Alison A. Kaufman, Daniel M. Hartnett, *Managing Conflict: Examining Recent PLA Writings on Escalation Control* (Washington, D.C.: CNA, February 2016), p. 51, available at <https://www.cna.org/reports/2016/drm-2015-u-009963-final3.pdf>.

⁹ For more on the origins and implications of this topic, see, Kyle Balzer and Dan Blumenthal, "The True Aims of China's Nuclear Buildup: Beijing's Growing Arsenal Is Meant to Dissolve America's Alliance System in Asia," *Foreign Affairs*, November 21, 2024, available at <https://www.foreignaffairs.com/china/true-aims-chinas-nuclear-buildup>.

¹⁰ U.S. Department of Defense, *Military and Security Developments Involving the People's Republic of China 2022* (Washington, D.C.: Department of Defense, 2022), p. 97, available at <https://media.defense.gov/2022/Nov/29/2003122279/-1/-1/1/2022-MILITARY-AND-SECURITY-DEVELOPMENTS-INVOLVING-THE-PEOPLES-REPUBLIC-OF-CHINA.PDF>; and, U.S. Department of Defense, *Military and Security Developments Involving the People's Republic of China 2023*, op. cit., p. VIII.

¹¹ U.S. Department of Defense, *Military and Security Developments Involving the People's Republic of China 2024*, op. cit., p. 101; and, U.S. Department of Defense, *Military and Security Developments Involving the People's Republic of China, 2022*, op. cit., p. 94.

¹² On information operations, see especially, Michaela Dodge, *Russia's Influence Operations in the Czech Republic, Poland, and Romania* (Fairfax, VA: National Institute Press, April 2022), *Occasional Paper*, Vol. 2, No. 4, available at <https://nipp.org/wp-content/uploads/2022/04/OP-Vol.-2-No.-4.pdf>.

the U.S. Department of Defense estimates that Russia has suffered over 700,000 casualties in Ukraine, the loss of tens of thousands of military vehicles, waves of economic sanctions, a cratered ruble, and an exodus of educated elites to avoid compulsory military service.¹³

Even as Russia has expended much of its military capabilities against Ukraine, its defense industrial base has proven resilient and able to replace its losses—such that Russia was able to grow its military by 15% in 2024 over 2022 levels.¹⁴ The Commander of United States European Command, Gen. Christopher Cavoli, testified that, “...Russia’s nuclear forces have been unaffected by the conflict, and Russia retains the largest arsenal of deployed and non-deployed nuclear weapons in the world.”¹⁵ Additionally, “... Russia continues to modernize its nuclear forces, and continues to pursue efforts to develop nuclear-capable intercontinental ballistic missile systems, nuclear-armed hypersonic boost glide vehicles, nuclear-powered cruise missiles, nuclear-powered underwater drones, anti-satellite weapons, and orbital nuclear weapons.”¹⁶ Given Russia’s significant advantage over NATO in non-strategic nuclear weapons, its rebuilt conventional forces, and its consistently revisionist foreign policy, the United States must consider Russia a prime threat to engage in opportunistic aggression at best and coordinated aggression at worst.¹⁷

Democratic People’s Republic of Korea

North Korean leader Kim Jong Un’s primary goals are to maintain political control for the Kim family and deter potential U.S. and South Korean attacks, while retaining the ultimate goal of “unifying” the Korean Peninsula under North Korean rule. The DPRK continues to test nuclear-capable missiles, issue nuclear threats, and generally provoke South Korea in measures short of war.¹⁸ Even more concerning for the United States and South Korea, however, is North Korea’s apparent efforts to introduce warfighting roles for its nuclear weapons at the regional level and beyond: “The DPRK is developing and fielding mobile short-, intermediate-, and intercontinental-range nuclear capabilities that place the United

¹³ Lloyd J. Austin III, “Remarks by Secretary Lloyd J. Austin III After His 25th and Final Meeting of the Ukraine Defense Contact Group (As Delivered),” *Defense.gov*, January 9, 2025, available at <https://www.defense.gov/News/Speeches/Speech/Article/4025257/remarks-by-secretary-lloyd-j-austin-iii-after-his-25th-and-final-meeting-of-the/>.

¹⁴ Brad Dress, “US general says Russian army has grown by 15 percent since pre-Ukraine war,” *The Hill*, April 11, 2024, available at <https://thehill.com/policy/defense/4589095-russian-army-grown-ukraine-war-us-general/>.

¹⁵ Christopher G. Cavoli, *Statement of General Christopher G. Cavoli, United States Army, United States European Command* (Washington, D.C.: House Armed Services Committee, April 10, 2024), p. 2, available at <https://www.eucom.mil/document/42803/useucom-gen-cavoli-cpshasc2024pdf>.

¹⁶ *Ibid.*, pp. 2-3.

¹⁷ On Russia’s perception about non-strategic nuclear weapon advantages, see, U.S. Department of Defense, *Nuclear Posture Review* (Washington, D.C.: Department of Defense, 2018), p. 9, available at <https://media.defense.gov/2018/feb/02/2001872886/-1/-1/1/2018-nuclear-posture-review-final-report.pdf>.

¹⁸ Nike Ching, “US Urges North Korea to Halt Provocations, Return to Diplomacy,” *Voice of America*, January 24, 2024, available at <https://www.voanews.com/a/us-urges-north-korea-to-halt-provocations-return-to-diplomacy/7455894.html>.

States homeland and regional Allies and partners at risk.”¹⁹ Over 70 years after the Korean Armistice, North Korea remains a significant regional threat to U.S. forces and U.S. allies and cannot be excluded from considerations about the potential for opportunistic aggression in the future.

Islamic Republic of Iran

Iran aspires to be a regional hegemon and has shown itself willing to employ military means to advance its revisionist ambitions. Iran continues to be the leading state sponsor of terror in the world and has supplied missiles to a range of actors, from Hezbollah in Lebanon to the Houthi rebels on the Arabian Peninsula. Its 2024 large scale missile attack on Israel demonstrated Iran’s propensity for risk-taking in foreign aggression, although Israel’s response against Iran and its proxies may temper Iran’s immediate ambitions temporarily. Iran remains a latent nuclear power and U.S. Northern Command assesses, “Iran’s burgeoning nuclear and space launch programs provide a viable pathway for developing a North America-threatening ICBM should its leaders determine that they need a more forceful means of challenging the United States.”²⁰ Absent a significant change in leadership and regional goals, Iran is likely to remain a significant threat to U.S. forces and allies in the region for the foreseeable future.

The Threats of Opportunistic and Coordinated Aggression

Threats from the four states outlined above, China, Russia, North Korea, and Iran, are significant in and of themselves, but each state for its own reasons has begun to invest greater political and military capital into cooperative partnerships with each other. These autocracies are developing something akin to a “division of labor” in which they trade their destabilizing products or services among themselves according to their specialties. The result, as Gen. Gregory Guillot has testified, is that “... competitors have formed strategic relationships that increase their collective ability to challenge U.S. and allied interests around the world with growing disregard of international norms or the sovereignty of nations that challenge their expansionist ambitions.”²¹ These cooperative relationships are concerning enough, but, as Gen. Guillot goes on to state, autocratic cooperation is becoming formalized in state-to-state agreements: “... strategic cooperation between and among our four principal adversaries has grown substantially since the beginning of the Ukraine War,

¹⁹ Anthony J. Cotton, *Statement of Anthony J. Cotton, Commander, United States Strategic Command* (Washington, D.C.: Senate Armed Services Committee, February 29, 2024), pp. 5-6, available at https://www.armed-services.senate.gov/imo/media/doc/cotton_statement.pdf.

²⁰ Gregory M. Guillot, *Statement of General Gregory M. Guillot, United States Air Force, Commander, United States Northern Command and North American Aerospace Defense Command* (Washington, D.C.: Senate Armed Services Committee, February 12, 2025), p. 9, available at https://www.armed-services.senate.gov/imo/media/doc/guillot_statement1.pdf.

²¹ *Ibid.*, p. 3.

increasing the risk that war with one adversary could quickly expand into war with an enemy coalition.”²²

Policymakers in the United States and allied states must collectively grasp the scope and severity that the threats of opportunistic and coordinated aggression pose to their security. Deterring and defeating these threats cannot work if the United States alone, or allies alone, do not understand the uniquely dangerous nature of these threats—that will lead to a lack of preparation, unrealistic expectations and, ultimately, defeat. Regrettably, the United States and its allies have been slow to recognize and act upon the potentially existential implications raised by the threats of opportunistic and coordinated aggression.

While the 2018 *Summary of the National Defense Strategy* mentioned the need to deter opportunistic aggression, the 2018 *Nuclear Posture Review* did not—although it did emphasize the highly revisionist nature of Russia’s and China’s leadership.²³ The 2022 *National Defense Strategy* and 2022 *Nuclear Posture Review* reiterated the aggressive intentions of Russia and China while also highlighting the threat of opportunistic aggression in a second theater.²⁴ The 2022 *Nuclear Posture Review* included the statement, “In a potential conflict with a competitor, the United States would need to be able to deter opportunistic aggression by another competitor. We will rely in part on nuclear weapons to help mitigate this risk, recognizing that a near-simultaneous conflict with two nuclear-armed states would constitute an extreme circumstance.”²⁵ The 2022 *Nuclear Posture Review* does not elaborate on what an increased U.S. reliance on nuclear weapons for deterring opportunistic aggression would look like in practice, whether that be a lower threshold for nuclear employment, increased signaling utilizing nuclear weapon systems, a higher alert rate for nuclear forces, or other such actions.

As the congressionally mandated bipartisan 2023 Strategic Posture Commission noted, China and Russia, both separately and together, present a set of challenges that the United States has not faced before, and “the risk of conflict with these two nuclear peers is increasing. It is an existential challenge for which the United States is ill-prepared....”²⁶ U.S. Government officials are loathe to make such urgent calls for action publicly, but numerous non-government studies have come to the conclusion that unless the United States greatly increases its conventional and nuclear capabilities, deterrence may fail in more than one theater against more than one major adversary.²⁷ And yet, even if the United States were to

²² Ibid., p. 6.

²³ U.S. Department of Defense, *Summary of the 2018 National Defense Strategy of the United States of America*, op. cit., p. 6; and, U.S. Department of Defense, *Nuclear Posture Review*, op. cit., p. 6.

²⁴ U.S. Department of Defense, *2022 National Defense Strategy of the United States of America*, op. cit., p. 17; and, U.S. Department of Defense, *2022 Nuclear Posture Review*, op. cit., p. 6.

²⁵ U.S. Department of Defense, *2022 Nuclear Posture Review*, op. cit., p. 12.

²⁶ Creedon and Kyl, *America’s Strategic Posture*, 2023, op. cit., p. vii.

²⁷ See, for instance, the recommendations in *ibid.*; Keith B. Payne and David J. Trachtenberg, *Deterrence in the Emerging Threat Environment: What is Different and Why it Matters* (Fairfax, VA: National Institute Press, August 2022), *Occasional Paper*, Vol. 2, No. 8, available at <https://nipp.org/wp-content/uploads/2022/08/OP-Vol.-2-No.-8.pdf>; and, Roberts, *China’s Emergence as a Second Nuclear Peer*, op. cit.; and, Greg Weaver, “Part I: US Deterrence Requirements in the Coming Two Nuclear Peer Threat Environment,” chapter in, Weaver and Woolf, *Requirements for Nuclear Deterrence and Arms*

make the necessary investments in its military force posture, adversaries may still perceive the U.S. public and/or its leaders as unwilling to engage in conflict with one, or possibly two, peer nuclear-armed adversaries in defense of allies in far-off lands.²⁸ The growing strain of isolationism in American politics, as the 2023 Strategic Posture Commission also noted, may be a dangerous signal to U.S. adversaries that they can employ their threats or use of force successfully.²⁹ The reluctance of U.S. officials to discuss openly, much less actively prepare for, the likelihood of adversarial opportunistic or coordinated aggression appears to be a classic case of what Roberta Wohlstetter termed “the pleasures of self-deception”—delaying difficult choices and ignoring warnings to such an extent that it makes conflict more likely and more costly.³⁰

Increasingly numerous examples of adversarial cooperation are making it more difficult for U.S. and allied officials to deny the severity of the threat. Russia and North Korea, for instance, recently signed a formal mutual defense treaty, making official the apparent *quid pro quo* that allowed Kim to loan North Korean infantry to Russia to fight in Ukraine, potentially in return for “expertise that could accelerate Pyongyang’s development of advanced strategic weapons.”³¹ Similarly, Russia and Iran recently signed a 20-year strategic partnership pact that formalized a deeper political and military relationship, to include joint training and port visits.³²

The most prominent and consequential cooperation, of course, is Russia’s and China’s political rapprochement, which is leading to increasingly integrated military relations and exercises.³³ Indeed, even their respective nuclear strategies appear to be converging on a similar set of strategic capabilities, as articulated by then-Commander of USSTRATCOM ADM Charles Richard: “Russia and the PRC have the ability to... escalate to any level of violence in any domain, they can do it worldwide, and they can do it with any instrument of national

Control in a Two Nuclear Peer Threat Environment, op. cit.; and, Robert Peters, *A Nuclear Posture Review for the Next Administration: Building the Nuclear Arsenal of the 21st Century* (Washington, D.C.: The Heritage Foundation, July 30, 2024), available at <https://www.heritage.org/sites/default/files/2024-07/SR287.pdf>.

²⁸ Harman and Edelman, *Commission on the National Defense Strategy*, op. cit., pp. VI, 10.

²⁹ Creedon and Kyl, *America’s Strategic Posture*, 2023, op. cit., pp. 4-5.

³⁰ Roberta Wohlstetter, “The Pleasures of Self-Deception,” *The Washington Quarterly*, Vol. 2, No. 4 (1979), pp. 54-63.

³¹ On the treaty, see, “North Korea, Russia Defence Treaty Comes into Force,” *AFP*, December 4, 2024, available at <https://www.france24.com/en/live-news/20241204-north-korea-russia-defence-treaty-comes-into-force>. The quotation is from Gregory M. Guillot, *Statement of General Gregory M. Guillot, United States Air Force, Commander, United States Northern Command and North American Aerospace Defense Command*, op. cit., p. 6.

³² Vladimir Soldatkin and Andrew Osborn, “Putin and Iran’s President Deepen Defence ties with 20-year Pact,” *Reuters*, January 17, 2025, available at <https://www.reuters.com/world/iranian-president-arrives-moscow-treaty-signing-with-putin-tass-says-2025-01-17/>.

³³ Liu Zhen, “China’s New Defence Minister Urges ‘Closest’ Military Relations in First Talks with Russian Counterpart,” *South China Morning Post*, February 1, 2024, available at <https://www.scmp.com/news/china/military/article/3250511/new-chinese-defence-minister-dong-jun-speaks-russian-counterpart>.

power. We're just not used to dealing with competitions and confrontations like that. We can't do that from a regional point, alone."³⁴

ADM Richard's concluding point, that challenges to the United States from China and Russia are likely to be global in nature, highlights a final reason why the threats of opportunistic or coordinated aggression are increasingly relevant to U.S. deterrence and force requirement calculations: the United States is unprepared to meet this challenge due to a lack of capabilities and potentially even a lack of political will during a time of simultaneous or sequential crises. The United States has avoided significantly altering its post-Cold War "one major war" planning construct for its conventional forces—and it is too early to tell whether the returning Trump Administration will advocate for a shift towards a "two war strategy."³⁵ Similar to U.S. conventional forces, the 2023 Strategic Posture Commission notes that despite roughly 10 years of evidence that the planning assumptions underpinning the current U.S. nuclear modernization program of record were no longer valid, the United States has done relatively little to alter the program of record to meet emerging deterrence requirements.³⁶

How then should U.S. and allied policymakers think about the threats of opportunistic and coordinated aggression? Specifically, what aspects of these threats make them unique? The dangers fall in four general categories.

First, adversaries may believe that the combination of their local nuclear and conventional advantages and the overwhelming set of U.S. alliance obligations presents a window of opportunity for aggression. Adversaries that might otherwise be unwilling to risk direct confrontation with the United States and its allies could perceive their favorable local balances of power as having greater coercive power in light of U.S. leaders being forced to balance allied needs in multiple theaters simultaneously or sequentially. If adversaries believe the United States will likely be unwilling, or potentially unable, to shift enough military forces from other theaters in time to combat a *fait accompli*, then the opportunity for successful aggression at relatively minimal cost and risk may prove too tempting to pass up.

Second, without changes to the U.S. conventional and nuclear force posture, the threats of opportunistic and coordinated aggression will likely force U.S. leaders to prioritize between sets of allies in different geographic regions—risking alliance unity across the globe.³⁷ Failure to successfully defend allies in one region might destabilize U.S. alliances in other regions and invite more aggression, creating a vicious cycle.

³⁴ Charles A. Richard, as quoted in, "2022 Space and Missile Defense Symposium," *STRATCOM.mil*, August 11, 2022, available at <https://www.stratcom.mil/Media/Speeches/Article/3126694/2022-space-and-missile-defense-symposium/>.

³⁵ On the history and consequences of this, see, David J. Trachtenberg, *The Demise of the "Two-War Strategy" and Its Impact on Extended Deterrence and Assurance* (Fairfax, VA: National Institute Press, June 2024), *Occasional Paper*, Vol. 4, No. 6, available at <https://nipp.org/wp-content/uploads/2024/06/Vol.-4-No.-6.pdf>.

³⁶ Creedon and Kyl, *America's Strategic Posture*, op. cit., pp. 38-39, 43.

³⁷ For more on this point, see, David Allison, Savannah Blalock, E. Paige Price, Micah Howard, Tim McDonnell, Victoria Sanchez, Stephan Varga, and Angela Weaver, *Understanding Opportunistic Aggression in the Twenty-First Century: A*

Third, without changes to the U.S. conventional force size and posture, the United States may need to rely more on nuclear weapons to deter or defeat opportunistic and coordinated aggression. Relying more on nuclear weapons may take different forms depending on the political needs of the moment and the dynamics of a conflict, but it could involve additional deterrence threats, lower employment thresholds, force posture changes, more forces in theater, or even first use.

Fourth, U.S. political and military leaders may need to rely on riskier strategies during a conflict that hold out potentially greater hope of a faster and favorable resolution, although at the cost of a greater risk of adversary escalation. U.S. leaders may, in other less-stressing circumstances, prefer to observe certain operational restraints, such as refraining from homeland-to-homeland strikes or withholding attacks on certain classes of targets; yet, in the face of opportunistic or coordinated aggression, these normally preferable restraints may be deemed too risky or costly to observe if the United States wants to preserve enough forces in time to reinforce the second theater.

In short, the potential for Chinese and Russian opportunistic or coordinated aggression will challenge U.S. deterrence strategy and its related military capabilities in ways that planning and preparing for singular aggression do not. The unprecedented nature of this combination of major powers, China and Russia, and minor powers, namely North Korea and Iran, working in tandem against the United States and its allies, makes any lesson that might be gleaned from the history of opportunistic or coordinated aggression especially valuable for U.S. officials today. The following articles utilize case studies toward this end.

OPPORTUNISTIC AGGRESSION IN THE PAST AND LESSONS FOR TODAY: THE KOREAN WAR

Introduction

President Harry Truman led the United States from the conclusion of a globe-spanning conflict, World War II, to the beginning of a limited war under the nuclear shadow, the Korean War.³⁸ While the Soviet Union's successful 1949 test of a nuclear device shocked many in the U.S. government, the greater worry was the threat of Soviet opportunistic aggression while the undersized U.S. military was preoccupied on the Korean Peninsula. Although historical parallels are never perfect, U.S. leaders today also face the stark possibility of opportunistic aggression, or even coordinated aggression, under the nuclear

Project on Nuclear Issues Mid-Cadre Task Force Report (Washington, D.C.: CSIS, 2024), pp. 14, 18-19, available at <https://www.csis.org/analysis/understanding-opportunistic-aggression-twenty-first-century>.

³⁸ This article is an edited version of Chapter 3 in Matthew R. Costlow, *Detering the New Pacing Threats: Opportunistic and Coordinated Aggression* (Fairfax, VA: National Institute Press, March 2025), *Occasional Paper*, Vol. 5, No. 3, available at <https://nipp.org/wp-content/uploads/2025/04/Vol.-5-No.-3.pdf>.

shadow and thus will benefit from examining the hard-learned lessons of the past. Historical cases, such as the Korean War, can therefore aid policymakers in gauging the kinds of political and military decisions leaders may face, as well as the military capabilities that may be most relevant.

This article addresses four critical elements of the threat of opportunistic aggression in the nuclear age, and specifically in the Korean War: first, whether political and military leaders were aware before the crisis or conflict of the potential for opportunistic aggression; second, the political and military actions or restraints used during the crisis or conflict to deter opportunistic aggression elsewhere; third, the adequacy of conventional and nuclear forces, and the tradeoffs between them; and fourth, the role of allies in the formation of political objectives throughout the crisis or conflict. While each of these elements are to some extent interdependent, nevertheless, these categories are helpful in highlighting some of the major decisions facing political and military leaders that are engaged in one crisis or conflict while simultaneously seeking to deter further aggression elsewhere.

Threat Perceptions of Opportunistic Aggression

In the years leading up to the Korean War, U.S. political and military leaders generally agreed that the Soviet Union was expansionist by nature and opportunistic, but still hindered by its massive losses from World War II. The 1948 Soviet-backed *coup d'état* in Czechoslovakia and Berlin Blockade helped convince U.S. and European allied officials of the need to form an alliance that ultimately resulted in the North Atlantic Treaty Organization (NATO) in 1949. The Soviet Union, also in 1949, successfully tested its first atomic device and ended the U.S. monopoly on that technology. In short, U.S. officials were highly attuned to potential Soviet aggression well before the Korean War, but their focus was predominantly on Europe.

As Frank Pace, Secretary of the Army 1950-1953, explained concerning U.S. views of the Soviet Union at the time, "We believed at that time [immediately post-World War II] that there was a very reasonable chance that this fellow was going to lick his wounds and get all the pieces back together again. The last thing that any of us could imagine was engaging in some kind of war with Russia as early as 1950."³⁹ In keeping with that general assessment, before the outbreak of the Korean War, President Truman and the Joint Chiefs of Staff were united in their desire to withdraw the "constabulary" force of approximately 50,000 U.S. troops on the Korean Peninsula as quickly as possible without provoking Soviet aggression or appearing to abandon a partner.⁴⁰ President Truman had made it a top priority post-World War II to shrink the U.S. military budget to better enjoy the peace dividend while the Soviet Union was regrouping.

³⁹ Alfred Goldberg and Harry B. Yoshpe, *Interview with Frank Pace, Secretary of the Army 1950-1953* (Washington, D.C.: OSD Historical Office, May 13, 1974), p. 12, available at https://history.defense.gov/Portals/70/Documents/oral_history/OH_Trans_PaceFrank5-13-1974.pdf?ver=2014-05-28-135107-660.

⁴⁰ James F. Schnabel and Robert J. Watson, *The Joint Chiefs of Staff and National Policy, Volume III: 1950-1951, The Korean War, Part I* (Washington D.C., Office of Joint History, 1998), pp. 7-8.

In Secretary of State Dean Acheson's January 12, 1950, speech before the National Press Club, he infamously did not include Korea in his description of a "defensive perimeter" that ran from the Aleutian Islands of Alaska, through the Ryukyu Islands of Japan, and down to the Philippines.⁴¹ While Kim-il Sung had expressed his desire to invade South Korea before this speech, it may have affected the timing of the invasion—and in any case was a prominent example of the secondary strategic importance the Truman Administration afforded the Korean Peninsula.⁴² It is, therefore, unsurprising that both Gen. MacArthur and Gen. Ridgway understood when they were Commander in Chief of Far East Command that, even in the midst of the Korean War, their first priority mission was to defend Japan from a potential Soviet invasion, with the secondary concern being the achievement of a successful outcome of war in Korea.⁴³

When North Korea invaded South Korea in June 1950, with what U.S. and allied leaders assumed was Soviet backing, threat perceptions concerning the Soviet Union began to change rapidly, and concern for the prospect of opportunistic aggression grew.⁴⁴ Gen. Hamilton A. Twitchell, Chief of Staff at Supreme Headquarters Allied Powers Europe (SHAPE) HQ, remembered the feeling that since the Soviets had shown themselves to be aggressive in Korea, then they could certainly be aggressive against Europe.⁴⁵

Indeed, U.S. leaders often cast U.S. intervention in the Korean War as an act of deterring opportunistic aggression itself. President Harry Truman laid out his logic for intervention in terms of deterrence, stating:

I felt certain that if South Korea was allowed to fall Communist leaders would be emboldened to override nations closer to our own shores. If the Communists were permitted to force their way into the Republic of Korea without opposition from the free world, no small nation would have the courage to resist threats and aggression by stronger Communist neighbors. If this was allowed to go unchallenged it would mean a third world war, just as similar incidents had brought on the second world war.⁴⁶

⁴¹ Dean Acheson, "Crisis in Asia—An Examination of U.S. Policy," *The Department of State Bulletin*, Vol. XXII, No. 551 (January 23, 1950), p. 116, available at <https://babel.hathitrust.org/cgi/pt?id=osu.32437010893382&seq=122>.

⁴² Kim had been pressing Stalin for his blessing to invade South Korea well before 1950. See, for example, Sergey Radchenko, *To Run the World: The Kremlin's Cold War Bid for Global Power* (New York: Cambridge University Press, 2024), pp. 134-136.

⁴³ Maurice Matloff, *Oral History Interview with General M. B. Ridgway* (Washington, D.C.: OSD Historical Office, April 18, 1984), pp. 6, 7, 14, available at https://history.defense.gov/Portals/70/Documents/oral_history/OH_Trans_RidgwayMatthew4-18-1984.pdf?ver=2014-09-19-081000-687. See also, Ridgway, *The Korean War*, op. cit., pp. 164-165.

⁴⁴ On Soviet views of North Korea's invasion plans, see, Radchenko, *To Run the World*, op. cit., pp. 134-138.

⁴⁵ Maurice Matloff, Alfred Goldberg, and Robert Watson, *Oral History Interview with General Hamilton A. Twitchell* (Washington, D.C.: OSD Historical Office, July 5, 1984), pp. 26-27, available at https://history.defense.gov/Portals/70/Documents/oral_history/OH_Trans_TwitchellHamilton7-5-1984.pdf?ver=2014-05-28-140052-920.

⁴⁶ Harry S. Truman, as quoted in, Schnabel and Watson, *The Joint Chiefs of Staff and National Policy, Volume III: 1950-1951, The Korean War, Part I*, op. cit., p. 32.

His Secretary of State, Dean Acheson, thought similarly: "To back away from this challenge, in view of our capacity for meeting it, would be highly destructive of the power and prestige of the United States. By prestige I mean the shadow cast by power, which is of great deterrent importance."⁴⁷ General Eisenhower, then-President of Columbia University, stated plainly that "We'll have a dozen Koreas soon if we don't take a firm stand."⁴⁸

Political and military threat perceptions thus changed dramatically in the space of only a few months from relatively little concern over Soviet aggression abroad in the near future to an overriding concern over direct Soviet aggression in one area and Soviet-supported aggression in other areas simultaneously. The United States and its allies were ill-equipped militarily to adapt to these rapid changes in the type and scope of the threats. This unpreparedness extracted a significant cost during the Korean War, as is evident in the next section, because U.S. leaders felt compelled to impose restraints on their military operations to avoid a further expansion of war they could not afford, politically or militarily.

Political and Military Actions to Avoid Opportunistic Aggression

The reasons why U.S. political leaders issued specific deterrence signals or imposed restraints on the military varied depending on the course of the conflict and the perceived danger of war expanding beyond the Korean Peninsula. President Truman, for instance, wrote in his diary on June 30, shortly after the beginning of the conflict, about his decision to intervene: "Must be careful not to cause a general Asiatic war."⁴⁹ Truman's concern was not hyperbolic given that only months earlier in February 1950, the Soviet Union and the newly formed People's Republic of China had signed a mutual defense treaty.⁵⁰ Thus, at the beginning stages of the war, there was an acute awareness of the need to keep China, and thus potentially the Soviet Union, out of the Korean War as active participants, lest it draw in Chiang Kai-shek in Taiwan or the nascent Japanese government in defense of the Northern Territories, below the Soviet-claimed Kuril Islands.

The Truman Administration, and later the Eisenhower Administration, sought to confine the Korean War to the Peninsula, a policy that involved a mixture of demonstrations of resolve and restraint. For instance, shortly after the initial North Korean attack against South Korea, the United States sought to demonstrate its resolve, and secondarily to deter opportunistic aggression, by deploying B-29 bombers to Europe and the Pacific that could, at least theoretically with the addition of specialized equipment, reduce the time needed to respond to a Soviet attack if Moscow intervened directly in Korea.⁵¹ Later, in 1951, President Truman publicly addressed Soviet and Chinese leaders and warned them that disregarding

⁴⁷ Dean Acheson, as quoted in, *Ibid.*, p. 33.

⁴⁸ As quoted in, David McCullough, *Truman* (New York: Simon & Schuster, 1992), p. 781.

⁴⁹ McCullough, *Truman*, op. cit., p. 783.

⁵⁰ Radchenko, *To Run the World*, op. cit., p. 134.

⁵¹ Roger Dingman, "Atomic Diplomacy during the Korean War," *International Security*, Vol. 13, No. 3 (Winter 1988-1989), pp. 55-60.

the tacit agreement that kept U.S. bombers out of China in exchange for Chinese and Soviet planes staying out of Korean airspace would “escalate” the conflict to their detriment.⁵² Beyond these specific demonstrations of force, the Truman Administration generally sought to convey the message that U.S. forces fighting in Korea were a tangible and costly signal of American resolve.⁵³

While the Truman Administration’s demonstrations of resolve were noteworthy deterrence signals, it is what the Truman Administration chose *not to do* that featured more prominently in its strategy to avoid Soviet opportunistic or coordinated aggression with the PRC. Perhaps the most prominent tacit restraint that kept the conflict confined to the Korean Peninsula was the U.S., PRC, and Soviet practice of keeping fighters and bombers out of each others’ airspace. That is, while the United States had complete air superiority over the Korean Peninsula, its pilots were under strict orders not to attack or bomb Chinese mainland targets—a practice that China reciprocated as Mao Zedong did not seek to escalate the conflict more than he already had.⁵⁴ This unspoken agreement also benefitted the United States by keeping the Japanese homeland free from Chinese or Soviet attacks—an important consideration as the United States was still occupying Japan itself.⁵⁵ As noted, however, the U.S. military was unable to prosecute the war as effectively as it wanted to, such as by striking Chinese bases used to deploy troops into Korea, for fear that it could incentivize Chinese or Soviet formal entry into the war.

During the summer of 1950, the Truman Administration faced two competing priorities that demanded greater levels of U.S. military capabilities: reinforcing allies in Europe as part of the newly-formed North Atlantic Treaty Organization and, on the other hand, winning the Korean War. President Truman was unwilling to initiate a full-scale mobilization of the United States to meet these simultaneous demands and thus chose to prioritize the European allies, while committing to keeping a steady level of forces in Korea to fight for the best possible outcome.⁵⁶ Indeed, the only major increase in U.S. forces in Korea came in response to Gen. MacArthur’s warning in 1950 that a protracted war in Korea would incentivize the Soviet Union to act aggressively elsewhere while the United States was preoccupied.⁵⁷

Put simply, the Truman Administration had to choose between two opposing strategies that sought the same goal: deterring opportunistic or coordinated aggression while achieving its goals in Korea. The first strategy was to significantly increase forces in Korea to seek a short sharp victory, but at the potential cost of minimizing reinforcements to Europe,

⁵² Ibid., p. 75.

⁵³ See, for instance, Harry S. Truman, as quoted in, Schnabel and Watson, *The Joint Chiefs of Staff and National Policy, Volume III: 1950-1951, The Korean War, Part I*, op. cit., p. 32.

⁵⁴ Matthew B. Ridgway, *The Korean War* (New York: Da Capo Press, 1967), p. 146.

⁵⁵ Ridgway, as quoted in, Dean Acheson, *Present at the Creation: My Years in the State Department* (New York: W.W. Norton & Company, 1969), p. 651.

⁵⁶ Maurice Matloff, *Oral History Interview with General M. B. Ridgway, Part II* (Washington, D.C.: OSD Historical Office, April 19, 1984), pp. 19-20, available at https://history.defense.gov/Portals/70/Documents/oral_history/OH_Trans_RidgwayMatthew4-19-1984.pdf?ver=2014-05-28-135246-783.

⁵⁷ Ridgway, *The Korean War*, op. cit., p. 36.

risking allied dissent, and potentially provoking Soviet opportunistic aggression in Europe. The second strategy was to prioritize reinforcing allies in Europe, but at the potential cost of risking a defeat or stalemate in Korea and the subsequent damage in the eyes of allies and adversaries about U.S. capability and will. President Truman chose the latter—electing to pursue only a limited conflict in Korea with all the political and military restraints that entailed, even if it meant military disadvantages for U.S. forces.

Adequacy of Conventional and Nuclear Forces

One of the key reasons that the Truman and Eisenhower Administrations perceived opportunistic or coordinated aggression as significant threats was the inadequacy of U.S. conventional and nuclear forces to meet the suddenly increasing deterrence and assurance requirements. The Chairman of the Joint Chiefs of Staff, Gen. Omar Bradley, for instance, warned President Truman that the United States could not commit the necessary military forces to Korea without either mobilization within the United States or failing to meet commitments in other parts of the world.⁵⁸ As described earlier, the constabulary force of U.S. soldiers in Korea was ill-equipped for even a limited war while reserves from the United States were inadequately trained and too few in number to have a significant effect on a relevant timescale.

Additionally, there was the matter of U.S. defense priorities. Given the recent formation of NATO and President Truman's decision to prioritize reinforcing Europe against what was perceived as a newly urgent threat of a Soviet attack, all the new forces that were being drafted and trained in the United States were primarily being sent to Europe. If the United States had sent those new forces to Korea, U.S. military leaders, with the exception of Gen. MacArthur, generally saw "no prospect" of shifting the required divisions in the proper time frame to Europe if the Soviets had invaded.⁵⁹ Indeed, the Korean War so altered U.S. and allied threat perceptions that in November 1951, the Joint Chiefs of Staff approved a plan to essentially triple the number of personnel and authorized air wings in the U.S. Air Force within less than four years—an incredible influx of resources over time.⁶⁰ Even with a series of massive investments across the military, however, the second Supreme Commander of Allied Powers for the Korean War, Gen. Matthew Ridgway, who was later the Secretary of the Army beginning in 1953, believed that in 1952-1953, the military forces available to NATO were "wholly inadequate to meet a sudden, full-scale attack by the Soviets..."⁶¹ Indeed, the calls from U.S. forces in Europe, and Berlin especially, were exceptionally dire. Gen. Maxwell

⁵⁸ Schnabel and Watson, *The Joint Chiefs of Staff and National Policy, Volume III: 1950-1951, The Korean War, Part I*, op. cit., p. 39.

⁵⁹ Matloff, *Oral History Interview with General M. B. Ridgway*, op. cit., pp. 31-32.

⁶⁰ Trevor Albertson, *Winning Armageddon: Curtis LeMay and Strategic Air Command, 1948-1957* (Annapolis, MD: Naval Institute Press, 2019), p. 47.

⁶¹ Matloff, *Oral History Interview with General M. B. Ridgway*, op. cit., p. 24.

Taylor, then U.S. Commander, Berlin (USCOB) and later Chairman of the Joint Chiefs of Staff, wrote to the Truman Administration that defense of Berlin "... is now militarily untenable."⁶²

This concern about inadequate forces led to a number of operational restraints and friction within the military. For instance, Gen. Ridgway recounts how Gen. MacArthur had repeatedly requested permission to attack targets in the PRC, across the Yalu River, to improve the U.S. military position, but the Truman Administration opposed this action because it could start "World War III" by incentivizing the Soviets to enter the conflict against ill-prepared U.S. forces. Indeed, then-Chief of Staff of the Air Force, Gen. Vandenberg, also opposed such operations because they would "so weaken us [through attrition and losses] that we will not be able to respond or build up for two years thereafter in case something breaks out in Europe."⁶³

The Truman Administration also sought to signal U.S. resolve and enhance assurance via the movement of nuclear-capable bombers, and even atomic weapons, overseas—actions not without numerous operational difficulties.⁶⁴ As Strategic Air Commander (SAC) Commander, Gen. Curtis LeMay during that time was concerned that the bombers needed for missions in the unforeseen Korean War would be unavailable for their original intended mission: deterrence and defeat of the Soviet Union.⁶⁵ At that time, the U.S. nuclear arsenal was still not large by any means and U.S. nuclear war plans had practically no hedge to accommodate unforeseen requirements on a finite number of bombers.⁶⁶

The Impact of Allied Perceptions on U.S. Leadership

The risk of opportunistic or coordinated aggression weighed heavily on the minds of allied leaders as the United States committed troops to Korea and tried to stand up NATO simultaneously. Dean Acheson, and the State Department more broadly, feared that Soviet aggression in a distant theater away from the Korean War "would call for the use of more military power than we could then deploy"—a doubly dangerous condition in that it offered a temptation to the Soviets and a quandary for the United States.⁶⁷ As U.N. forces successfully drove North Korean forces back toward the 38th Parallel, the British protested vehemently both Gen. MacArthur's rhetoric about expanding the Korean War to the Chinese mainland and the possibility of advances past the 38th Parallel as both risking general war with the

⁶² Ingo Trauschweizer, *Maxwell Taylor's Cold War: From Berlin to Vietnam* (Lexington, KY: University Press of Kentucky, 2019), p. 45.

⁶³ Matloff, *Oral History Interview with General M. B. Ridgway*, op. cit., p. 15.; See also Ridgway, *The Korean War*, op. cit., pp. 49-50.

⁶⁴ Doris E. Condit, *Interview of Robert A. Lovett* (Washington, D.C.: OSD Historical Office, June 7, 1976), pp. 26-27, available at https://history.defense.gov/Portals/70/Documents/oral_history/OH_Trans_LovettRobert6-7-1976.pdf?ver=2014-09-19-080949-827.

⁶⁵ Albertson, *Winning Armageddon*, op. cit., pp. 28-42.

⁶⁶ *Ibid.*, pp. 28-34.

⁶⁷ Acheson, *Present at the Creation*, op. cit., p. 421.

Soviet Union.⁶⁸ Thus, in December 1950, British Prime Minister Clement Attlee arrived for a meeting with President Truman to discuss the Korean War generally, but more specifically and privately, to urge President Truman to curtail U.S. involvement in Korea in favor of focusing on the defense of Europe—a major switch of British policy that, up until China's overt intervention, was staunchly behind U.S. efforts in the Korean War.⁶⁹

These and other allied private protestations led the Truman Administration to prioritize reinforcing Europe militarily while the Eisenhower Administration focused on ending the war quickly, but acceptably, to accomplish the same goal. Both administrations sought to walk the policy tightrope of assuring allies the United States was a reliable security guarantor and was willing to expend blood and treasure in cooperation with them, as evidenced in Korea, but would not commit too much blood and treasure elsewhere such that it risked deterrence failure in their immediate vicinity.

Lessons and Conclusions

As is evident from this case study, the threat of opportunistic or coordinated aggression increases the risks and potential costs of every plausible U.S. course of action. A limited war in Korea, a scenario that the United States was unprepared for, proved difficult in and of itself, but when combined with the real possibility of Chinese direct and formal entry into the Korean War and/or Soviet aggression in Europe, the threats and costs to the United States and its allies became magnified. What summary lessons can U.S. policymakers draw from the Korean War that may be relevant to the emerging two nuclear peer threat environment? Three stand out as especially relevant.

1. *Victory in a limited conflict may be ideal for deterring opportunistic or coordinated aggression, but the cost of victory may be deterrence failure in a second theater.*

As Gen. MacArthur stated repeatedly, a quick victory in Korea would be a potent demonstration of U.S. power, potentially deter future aggression, and would allow troops to be redeployed more quickly to other higher priority areas. Yet, as Gen. Ridgway, Gen. MacArthur's successor, noted in his history of the Korean War, "It is clear that the nation's top civilian and military leaders... [believed that] the kind of 'victory' sought by the Theater Commander, even if it were attained in Korea, would have incurred overbalancing elsewhere."⁷⁰ Victory in the Korean War might have been Pyrrhic if it led to Soviet aggression against a nascent NATO.

How can U.S. policymakers apply this lesson in today's context? First, they can recognize the importance of forces in being, i.e., those military forces immediately available for unexpected contingencies, and what can realistically be expected of them given other U.S.

⁶⁸ Dingman, "Atomic Diplomacy during the Korean War," op. cit., p. 70.

⁶⁹ Acheson, *Present at the Creation*, op. cit., p. 481.

⁷⁰ Ridgway, *The Korean War*, op. cit., p. 149.

commitments around the world, potentially with higher priorities. While a decisive victory in one theater may indeed improve the prospects of deterring opportunistic or coordinated aggression in other theaters, the pursuit of victory may also cause the United States to spread its forces too thin and ultimately result in the worst case scenario: failure in all theaters. This is not to say that U.S. policymakers must always eschew lesser priority theaters in the face of threats of opportunistic or coordinated aggression, only that they must understand the nature of the conflict and its purpose, à la Clausewitz.⁷¹ In short, there may be acceptable outcomes short of total victory in a limited war, such as denying the adversary victory, or achieving strategic advantage, that better hedge against the possibility of opportunistic or coordinated aggression in other theaters.

2. *Threat perceptions and military requirements are likely to change far more quickly than nuclear or conventional forces can adapt—potentially leading to accepting riskier strategies.*

As noted already, the Truman Administration felt compelled to fight a limited war in Korea because the military simply could not provide enough resources in the relevant time frame necessary to *both* reinforce NATO and achieve total victory in Korea. Indeed, even after almost three years and nearly a tripling of the U.S. defense budget, President Eisenhower rejected calls to increase the resources devoted to the Korean War to compel a quicker satisfactory conclusion to the conflict; he saw too much risk that such an increase would disrupt the NATO military buildup and anger essential allies in Europe.⁷² This dynamic points to the importance of available military forces at the time of conflict, and even more so, the importance of military forces already in theater. If time is of the essence, as it almost certainly will be facing the threat of opportunistic or coordinated aggression, then forces in theater will have an outsized role in determining what political goals the United States can realistically pursue and on what timeframe.

Another important aspect of forces in being is the flexibility of the U.S. nuclear force. Even granting that the U.S. nuclear force was still in its relative infancy during the time of the Korean War and far smaller than it is today, U.S. policymakers can still draw critical lessons from the difficulties that U.S. Strategic Air Command (SAC) encountered. For example, Gen. LeMay, SAC Commander, wrote in 1949, just before the outbreak of the Korean War, “The size of our [nuclear] striking force is so closely tailored to fit the task with which it is charged that we have little or no margin of safety within which we can absorb the effects of a successful enemy attack. Under these circumstances, it would appear economical and logical to adopt the objective of completely avoiding enemy attack against our strategic force by

⁷¹ “The first, the supreme, the most far-reaching act of judgement that the statesman and commander have to make is to establish by that test the kind of war on which they are embarking; neither mistaking it for, nor trying to turn it into, something that is alien to its nature.” Carl von Clausewitz, author, Michael Howard and Peter Paret, eds. and trans., *On War* (New York: Alfred A. Knopf, 1993), p. 100.

⁷² On the defense budget, see, Doris M. Condit, *The Test of War: 1950-1953* (Washington, D.C.: Department of Defense, 1988), p. 500. On Eisenhower’s views, see Dingman, “Atomic Diplomacy during the Korean War,” op. cit., p. 85.

destroying his atomic force before it can attack ours.”⁷³ In other words, Gen. LeMay recommended a strategy of preemption because the fragility and inflexibility of his forces meant he could not achieve the political objectives assigned to him in case of an attack on the United States—there simply was not enough of a hedge within the existing force.

What might this insight mean for U.S. policymakers today? In the face of opportunistic or coordinated aggression, especially after an attack on U.S. forces, the United States may be forced to prioritize, adopt riskier strategies, or both, to achieve the same political objectives. That is, if U.S. policymakers believe prioritizing some theaters or allies over others, or adopting riskier strategies like nuclear first use, are unacceptable, then they should invest in procuring sufficiently flexible nuclear and conventional forces that can withstand attacks and still achieve set political objectives. This is, of course, the costlier option financially and politically; but that fact must be weighed against the absence of these investments and the resulting likelihood of deterrence failure, plus those financial costs and the potential domestic and international political costs.

3. *Adversaries are likely to adapt their strategies if they believe that the United States is ill-equipped or unwilling politically to counter opportunistic or coordinated aggression.*

If adversaries perceive the United States as either unwilling or unable to engage in one conflict while deterring others, then they may have added incentive to pursue more aggressive strategies at the expense of the United States and its allies or pursue strategies that the United States is less able to counter. An example from the Korean War is how Nie Rongzhen, PLA acting Chief of Staff, stated that the United States was likely unwilling to employ nuclear weapons against China in North Korea because it was “deterred by possible Soviet nuclear retaliation from doing this in the Far East.”⁷⁴ This widely held belief among Chinese leaders allowed the PRC to adopt its strategy of concentrating troops to overwhelm better-equipped though outnumbered U.S. units. Similarly, the PRC’s Central Military Commission recommended a strategy of “protracted war” that it believed would favor China over time given the long logistics lines and domestic political pressure in the United States.⁷⁵ Chinese leaders recognized and centered their strategy around exploiting perceived U.S. vulnerabilities, part of which included the U.S. fear of Soviet opportunistic aggression elsewhere in the world.

Thus, adversaries will likely adopt strategies aimed at perceived U.S. vulnerabilities—and if one of those perceived vulnerabilities is being susceptible to simultaneous conflict, then the risk of that kind of conflict may grow. And, when combined with the second lesson listed above on the inherent limitations of quickly adapting U.S. military forces, U.S. political leaders may be forced to use inadequate forces to counter an adversary’s military strategy

⁷³ As quoted in, Albertson, *Winning Armageddon*, op. cit., p. 14.

⁷⁴ Nie Rongzhen, as quoted in, Shu Guang Zhang, *Mao’s Military Romanticism: China and the Korean War, 1950-1953* (Lawrence, KS: University Press of Kansas, 1995), p. 234.

⁷⁵ Ibid., pp. 76-77.

that is tailored to exploit U.S. vulnerabilities. This dynamic will likely create pressure to either abandon certain political commitments or adopt a strategy of nuclear escalation, two inherently dangerous options against nuclear-armed adversaries.

Conclusion

Overall then, the U.S. experience in the Korean War illustrates how the threats of opportunistic and coordinated aggression compound the difficulties and costs that U.S. political and military leaders are likely to face in the emerging threat environment. The threat of simultaneous conflicts during the Korean War shaped U.S. political goals, military strategy, resourcing, alliances, and even the adversary's military strategy. Unlike the Cold War, however, the United States today faces not just one, but two nuclear peer adversaries in China and Russia—partners who describe themselves as in a “friendship without limits”—plus their regional partners North Korea and Iran. Today, U.S. and allied officials should view the unique dangers and costs of opportunistic and coordinated aggression as orders of magnitude beyond those U.S. and allied leaders faced during the Korean War—only then can they begin to appreciate the scale and urgency needed to deter this growing network of threats.

* * * * *

DETERRING OPPORTUNISTIC AGGRESSION DURING THE CUBAN MISSILE CRISIS: NECESSARY REMINDERS AND APPLICATIONS FOR TODAY

Introduction

The popular image of the 1962 Cuban Missile Crisis is of President Kennedy and Premier Khrushchev going “eyeball to eyeball” over the placement of Soviet missiles in Cuba; but, this characterization leaves out just how important U.S. leaders considered Berlin to be during the crisis—making it a useful case study of the United States seeking to deter opportunistic aggression in one theater while engaged in a near-conflict in another theater.⁷⁶ Analyzing the Cuban Missile Crisis through the lens of deterring opportunistic aggression can yield some important lessons relevant to the current threat environment, characterized by two peer nuclear adversaries and their regional partners, all of which are revisionist in nature and capable of simultaneous or sequential aggression in geographically separate theaters.

This article examines the role that the threat of opportunistic aggression played in the Cuban Missile Crisis. First, it examines whether U.S. political and military leaders believed

⁷⁶ This article is an edited version of Chapter 4 in Matthew R. Costlow, *Deterring the New Pacing Threats: Opportunistic and Coordinated Aggression* (Fairfax, VA: National Institute Press, March 2025), available at <https://nipp.org/papers/matthew-r-costlow-deterring-the-new-pacing-threats-opportunistic-and-coordinated-aggression/>.

opportunistic aggression was a realistic possibility, and if so, the extent to which they were prepared to deter it. Second, it considers the political and military actions U.S. leaders took to deter opportunistic aggression both before and during the crisis. Third, it explores how U.S. political and military leaders judged the adequacy of their conventional and nuclear forces for various contingencies during the crisis. Fourth and finally, it examines how allies' views and interests affected U.S. actions to deter opportunistic aggression. The concluding section highlights and summarizes relevant lessons from the Cuban Missile Crisis for U.S. policymakers to consider as they make plans and provide resources to deter and defeat opportunistic and potentially coordinated aggression in the future.

Threat Perceptions of Opportunistic Aggression

The 1962 Cuban Missile Crisis was in some ways a continuation of the 1961 Berlin Crisis. From 1958-1961, culminating in the construction of the Berlin Wall, the Soviet Union placed ever greater pressure on the United States and its allies, Great Britain and France, to vacate Berlin completely. While West Berlin remained under allied control, it was essentially an island surrounded on all sides by East Germany, a member of the Warsaw Pact. Narrow road and air corridors linked West Berlin to West Germany, but if the Soviet Union and its allies sought to gain control of all of Berlin militarily, there was little NATO could do with its conventional forces in time to save the city. The attitude of U.S. leaders toward defending West Berlin therefore became something of a barometer that European allies could use to judge U.S. willingness and ability to come to their aid in a war against the Warsaw Pact.

Even though the United States and Soviet Union de-escalated the 1961 Berlin Crisis relatively peacefully, U.S. intelligence sources continued to indicate that the Soviets hoped to increase pressure on West Berlin—so when Soviet radars and missiles appeared in Cuba in October 1962, many U.S. leaders concluded that such actions were either meant to distract the United States from defending Berlin or meant to gain leverage over the United States to settle the Berlin question in the Soviet favor.⁷⁷ Once U.S. leaders understood the full scope of Soviet weaponry flowing into Cuba in October, their immediate reaction was to presume some sort of connection with Berlin. Secretary of State Dean Rusk, noted:

I think Berlin is very much involved in this [Khrushchev's motivation]. For the first time, I'm beginning really to wonder whether maybe Mr. Khrushchev is entirely rational about Berlin. We've already talked about his obsession with it... But they may be thinking that they can either bargain Berlin and Cuba against each other, or that they could provoke us into a kind of action in Cuba which would give them an umbrella for them to take action with respect to Berlin... If they could provoke us

⁷⁷ Central Intelligence Agency, *The President's Intelligence Checklist—28 July 1962* (Washington, D.C.: National Archives, July 28, 1962), declassified 2011, p. 1, available at <https://www.archives.gov/files/declassification/isicap/pdf/2011-056-doc11.pdf>.

into taking the first overt action, then the world would be confused and they would have what they consider to be justification for making a move somewhere else.⁷⁸

Concurrent U.S. intelligence assessments agreed: "They [the Soviets] also probably believe that the missiles will reinforce the deterrent link between Cuba and Berlin which was implicit in the 11 September Soviet statement and in subsequent private conversations. Moscow clearly is seeking to portray Berlin as a hostage for Cuba."⁷⁹

As the Cuban Missile Crisis progressed and the United States weighed seriously the option of a major attack on Soviet bases in Cuba, leaders in the White House became increasingly convinced that the Soviets would respond in some manner against Berlin. Secretary of Defense McNamara, for example, stated, "How will the Soviets react? ... How could Khrushchev afford to accept this action without some kind of rebuttal? He can't accept it without some rebuttal... Where?... How does this affect our allies' support of us in relation to Berlin?... Iran... and Korea... Exactly. And we call it a worldwide alert."⁸⁰ President Kennedy agreed, stating simply, "I think it is more likely he [Khrushchev] would just grab Berlin."⁸¹ Indeed, the Soviet Minister of Foreign Affairs Andrei Gromyko told President Kennedy on October 18, in the early stages of the crisis, that the Soviets would "be compelled" to end the allied presence in Berlin if the Soviet Union and the United States could not come to an agreement.⁸²

Given the global nature of U.S. commitments and the potential domino effect that U.S. action in one theater might have in another theater, how did U.S. political and military leaders act to deter or avoid provoking opportunistic aggression?

Political and Military Actions to Deter or Avoid Opportunistic Aggression

The Kennedy Administration felt compelled to act in response to Soviet actions in Cuba, even though some European allies might object and state that they had learned to live with being in range of regional Soviet nuclear missiles. Early on in the crisis President Kennedy acknowledged the "dilemma" posed by the U.S. outpost in Berlin and the Soviet capabilities in Cuba, stating that "action of a type contemplated would be opposed by the [NATO] alliance—on the other hand, lack of action will create disunity, lack of confidence and disintegration of our several alliances and friendly relations with countries who have

⁷⁸ Ernest R. May and Philip D. Zelikow, *The Kennedy Tapes: Inside the White House during the Cuban Missile Crisis* (Cambridge, MA: Harvard University Press, 1997), p. 61.

⁷⁹ Central Intelligence Agency, "Probable Soviet MRBM Sites in Cuba, October 16, 1962," p. 2, chapter in, Central Intelligence Agency, *The Secret Cuban Missile Crisis Documents* (Washington, D.C.: Brassey's, 1994), p. 141.

⁸⁰ May and Zelikow, *The Kennedy Tapes*, op. cit., pp. 115-116.

⁸¹ Ibid., p. 138.

⁸² Ibid., p. 168.

confidence in us.”⁸³ Secretary Rusk agreed, stating, “But we think that, when the full scope of this becomes known [in Europe], that [taking] no action would undermine our alliances all over the world very promptly... I think we also have to think of the effect on the Soviets if we were to do nothing. Now suppose that they were to consider this a major backdown, then this would free their hands for almost any kind of intervention that they might want to try in other parts of the world.”⁸⁴ Having decided to take action in response to the Soviets, the Kennedy Administration debated how best to demonstrate resolve, strengthen security, and reduce risks.

The U.S. response involved a mixture of demonstrating resolve through military posture changes as well as diplomatic consultations with allies, political signaling via official announcements, and certain internal risk-reduction measures. Secretary McNamara recognized early during the crisis that U.S. military preparations served dual purposes as both deterrence signals (both direct and extended deterrence) and, should deterrence fail, an improved ability to accomplish U.S. objectives.⁸⁵ McNamara stated plainly that U.S. actions were signaling multiple audiences simultaneously, both allies and the adversary: “It’s a political problem. It’s a problem of holding the alliance together. It’s a problem of properly conditioning Khrushchev for our future moves.”⁸⁶

Thus, President Kennedy and his advisors tailored his nationally-broadcast speech on October 22nd to act as both an assurance to allies and a deterrence threat to the Soviets. President Kennedy stated, “That is why this latest Soviet threat—or any other threat which is made either independently or in response to our actions this week—must and will be met with determination. Any hostile move anywhere in the world against the safety and freedom of peoples to whom we are committed—including in particular the brave people of West Berlin—will be met by whatever action is needed.”⁸⁷ These words were backed by deeds because only six hours before the speech, President Kennedy ordered the dispersal and alert of U.S. strategic bombers.⁸⁸ Gen. Curtis LeMay, then Chief of Staff for the U.S. Air Force, speaking publicly less than two months after the crisis, cited the bomber alert as a critical deterrence signal to the Soviets that helped deter opportunistic aggression: “Perhaps most important of all, our Strategic Air Command was able to move quickly to an alert that provided a strong and silent umbrella under which the quarantine could be carried out without expanding into war.”⁸⁹ In short, Gen. LeMay believed that generating nuclear forces

⁸³ McCone, “Memorandum for File, 19 October 1962,” p. 3, chapter in Central Intelligence Agency, *The Secret Cuban Missile Crisis Documents* (Washington, D.C.: Brassey’s, 1994), p. 185.

⁸⁴ May and Zelikow, *The Kennedy Tapes*, op. cit., p. 127.

⁸⁵ *Ibid.*, p. 87.

⁸⁶ *Ibid.*, p. 133.

⁸⁷ *Ibid.*, p. 280.

⁸⁸ *Strategic Air Command Operations in the Cuban Crisis of 1962, Vol. I* (Offutt AFB, NE: Strategic Air Command, 1963), Historical Study No. 90, Vol. 1, pp. 34-35, available at https://nsarchive2.gwu.edu/nsa/cuba_mis_cri/dobbs/SAC_history.pdf.

⁸⁹ Curtis LeMay, as quoted in, Mark S. Watson, “LeMay says Cuba Crisis Taught Five Key Lessons,” *The Baltimore Sun*, December 6, 1962, p. 16.

to a higher alert status allowed U.S. leaders to operate their conventional forces with more confidence that they could deter Soviet escalation in Cuba and elsewhere.

Adequacy of Conventional and Nuclear Forces

The Kennedy Administration pursued a “two and one half” war construct for its conventional war planning in which the Department of Defense prepared for major conflicts in Europe and East Asia, and a lesser conflict in a third region such as the Middle East.⁹⁰ The 1961 Berlin Crisis only accelerated the Kennedy Administration’s calls to Congress to grow the defense budget to meet the larger set and severity of threats. Yet, even after a steady stream of investment, U.S. leaders acknowledged their dependence on nuclear weapons to fight conventional wars—such was the size of the Soviet conventional advantage. Gen. Taylor testified to this fact, stating, “To meet a massive attack today, because of the lack of adequate conventional forces in the West, it would be necessary to resort to atomic weapons early in the conflict.”⁹¹

In fact, U.S. political and military leaders up to President Kennedy understood that a conventional battle for control over Berlin would almost certainly require U.S. nuclear first use. During the Cuban Missile Crisis, as the Executive Committee contemplated U.S. military options against the Soviet bases in Cuba, President Kennedy stated, “We have the prospect, if the Soviet Union, as a reprisal, should grab Berlin in the morning, which they could do within a couple of hours. Our war plan at that point has been to fire our nuclear weapons at them.”⁹² He clarified shortly afterwards that such a U.S. response was not meant to be a disarming first strike against the Soviet Union: “But, I think, if we’re talking about nuclear war, the escalation ought to be at least with some degree of control.”⁹³

Towards that end, the Commander of Strategic Air Command, Gen. Thomas Power, recommended to the Joint Chiefs of Staff on October 16th that the United States alert its forces in three ways: “generate all command forces through declaration of Defense Condition 2 (DEFCON 2), initiate B-47 dispersal plans, and mount an airborne alert.”⁹⁴ The Joint Chiefs of Staff ordered SAC to begin its bomber dispersal and alert almost immediately, but Secretary of Defense McNamara held off on ordering SAC to DEFCON 2, just below the level of general war, until October 23.⁹⁵ These general war preparations also included the U.S.

⁹⁰ Maurice Matloff, *Oral History Interview with Mr. Roswell L. Gilpatric, Deputy Secretary of Defense, 1961-1964* (Washington, D.C.: OSD Historical Office, November 14, 1983), p. 16, available at https://history.defense.gov/Portals/70/Documents/oral_history/OH_Trans_HarrimanAverell5-29-1975.pdf?ver=2014-05-28-130706-200.

⁹¹ Maxwell D. Taylor, as quoted in, U.S. Senate, *Nominations of Gen. Maxwell D. Taylor and Gen. Earle G. Wheeler* (Washington, D.C.: Committee on Armed Services, August 9, 1962), p. 4.

⁹² May and Zelikow, *The Kennedy Tapes*, op. cit., p. 264.

⁹³ *Ibid.*, p. 273.

⁹⁴ *Strategic Air Command Operations in the Cuban Crisis of 1962, Vol. I*, op. cit., p. 30.

⁹⁵ May and Zelikow, *The Kennedy Tapes*, op. cit., p. 347.

Navy deploying its new Polaris submarines (SSBNs) to their battle stations while SSBNs in port entered a higher state of readiness.⁹⁶

In advance of moving to DEFCON 2, SAC ordered all its units to focus on “covertly attaining the maximum state of readiness.”⁹⁷ It is unclear if the emphasis on “covert” was meant to provide maximum advantage for a preemptive strike against the Soviet forces in Cuba should President Kennedy have ordered it or whether it was to increase readiness without inadvertently escalating the situation overall. The historical record contains evidence for both justifications and, in Europe at least, U.S. military leaders saw the quiet increase in readiness as supporting both U.S. attack options and refraining from appearing overly aggressive.⁹⁸ This quiet change in posture in Europe may have helped incentivize the Soviet Union to also keep their forces from moving to a higher alert—the U.S. intelligence community had no significant indications of major Soviet posture changes against NATO or Asian allies even during the height of the crisis.⁹⁹

The Impact of Allied Perceptions on U.S. Leadership

Senior officials in the Kennedy Administration frequently voiced their concerns about alliance solidarity and security as they debated how to respond to Soviet movements into Cuba. Secretary of State Dean Rusk and President Kennedy often suggested to the larger group that key allies should be notified about U.S. deliberations and options, such as Great Britain, France, and the Federal Republic of Germany, or West Germany.¹⁰⁰ Turkey and Italy also played prominent roles in U.S. deliberations as they hosted U.S. Thor intermediate-range ballistic missiles (IRBMs); this status as host nations meant they were simultaneously the potential targets of a Soviet response to U.S. moves against Cuba, while also being the potential subjects of a missile swap agreement between the United States and Soviet Union—withdrawal for withdrawal.

One of the major divisions that developed early on in President Kennedy’s Executive Committee was between those who believed large-scale decisive military action against the Soviets in Cuba would be the greatest assurance to allies, particularly in Europe, and those who believed that overly-aggressive action against Cuba could provoke a Soviet response against Berlin, or elsewhere in the world, leading to a dissolution of U.S. alliances.¹⁰¹ President Kennedy at one point during the Cuban Missile Crisis engaged in a long

⁹⁶ Curtis A. Utz, *Cordon of Steel: The U.S. Navy and the Cuban Missile Crisis* (Washington, D.C.: Naval Historical Center, Department of the Navy, 1993), p. 22, available at <https://www.govinfo.gov/content/pkg/GOVPUB-D221-PURL-gpo115515/pdf/GOVPUB-D221-PURL-gpo115515.pdf>.

⁹⁷ *Strategic Air Command Operations in the Cuban Crisis of 1962, Vol. I*, op. cit., p. 55.

⁹⁸ May and Zelikow, *The Kennedy Tapes*, op. cit., p. 338.; and, United States Air Force in Europe, *Chronology of the Cuban Crisis for the Period 6 October thru November 1962* (Washington, D.C.: U.S. Air Force, December 21, 1962), pp. 8-9, available at <https://nsarchive.gwu.edu/document/20790-12>.

⁹⁹ Utz, *Cordon of Steel*, op. cit., p. 29.

¹⁰⁰ For example, see, May and Zelikow, *The Kennedy Tapes*, op. cit., p. 56.

¹⁰¹ *Ibid.*, p. 172.

explanatory discussion with his advisers, laying out what he believed, at the time, were equally weighty concerns—the risks of taking military action that provokes Soviet reactions against U.S. allies in Europe, versus taking insufficient action, also potentially provoking Soviet reaction against U.S. allies in Europe.¹⁰² Secretary Rusk noted that this dilemma was even more difficult since what mattered to allies was not just what the United States decided to do, but how it decided to do it: “... an unannounced, unconsulted, quick action on our part could well lead to a kind of allied disunity that the Soviet attack will capitalize upon very strongly.”¹⁰³ The U.S. ambassador to the United Nations, Adlai Stevenson II, highlighted the nuclear element of the dilemma as it related to allies, noting flatly, “To start or risk starting a nuclear war is bound to be divisive at best.”¹⁰⁴

By October 25th, however, cracks in the alliance were beginning to show as Prime Minister Macmillan told President Kennedy “I think that events have gone too far. While circumstances may arise in which such action [by the U.S. military] would be right and necessary, I think we are now all in a phase where you must try to obtain your objectives by other means.”¹⁰⁵ Meanwhile, French President Charles de Gaulle signaled his support for U.S. actions whatever their nature.¹⁰⁶ And, on the other side of spectrum opposite Macmillan, Chancellor Konrad Adenauer of West Germany favored both bombing the Soviet bases in Cuba as well as a general invasion as he hoped that it would serve as a bargaining chip to eventually end the crisis.¹⁰⁷ Inter-alliance solidarity became even more stressed when President Kennedy’s National Security Advisor, McGeorge Bundy, had to discourage Prime Minister Macmillan from making a separate diplomatic offer to the Kremlin to remove U.S. missiles from Great Britain to help solve the situation in Cuba.¹⁰⁸

Senior officials in the Kennedy Administration were acutely aware of allied concerns and interests throughout the Cuban Missile Crisis and often adapted their policy pronouncements and military actions to strengthen alliance solidarity, or, at the very least, reduce the causes for friction. The United States is only now in the early stages of recognizing that deterring the threats of opportunistic and coordinated aggression, and the parallel need for increased resources, is also equally challenging in the realm of allied assurance. During the Cuban Missile Crisis, the Kennedy Administration primarily focused on assuring allies in Europe; but today, the United States faces growing assurance requirements for both European and Asian allies.

¹⁰² May and Zelikow, *The Kennedy Tapes*, op. cit., pp. 175-176.

¹⁰³ Ibid., p. 128.

¹⁰⁴ Ibid., p. 118.

¹⁰⁵ Ibid., p. 393.

¹⁰⁶ Lucius D. Battle, *Dean G. Acheson Oral History Interview—JFK #1, 4/27/1964* (Boston, MA: JFK Presidential Library, 1964), pp. 26-28, available at <https://static.jfklibrary.org/16jy54bi4rncv563u763ql7a4ja4033f.pdf?odc=20231115182924-0500>.

¹⁰⁷ “Memorandum of Conversation, Federal Republic of Germany Chancellor Konrad Adenauer and US Ambassador Walter Dowling, Rhöndorf, West Germany, 28 October 1962,” chapter in, James G. Hershberg and Christian F. Ostermann, *The Global Cuban Missile Crisis at 50* (Washington, D.C.: The Wilson Center, Fall 2012), p. 634, available at <https://www.wilsoncenter.org/publication/bulletin-no-1718-fall-2012>.

¹⁰⁸ May and Zelikow, *The Kennedy Tapes*, op. cit., p. 629.

Summary Lessons of the Cuban Missile Crisis and Conclusion

There are three summary lessons from the Cuban Missile Crisis that are especially relevant for U.S. policymakers today as they consider how to adapt U.S. policy and military forces to better counter the threats of opportunistic and coordinated aggression: the significant value of flexible and diverse military capabilities for risk reduction; how inadequate conventional capabilities can force leaders to consider potentially riskier strategies like nuclear first use; and, the how allies may pressure U.S. leaders during a conflict to adopt riskier strategies to end the conflict earlier on favorable political terms.

1. *Flexible force generation capabilities provide valuable deterrence options for U.S. leaders that improve the ability to send tailored signals and reduce risks of misperceptions.*

Senior civilian and military U.S. officials took great care to tailor their deterrence messages, including deterring Soviet opportunistic aggression against Berlin, with a mix of signals of resolve and restraint. On October 22nd, for instance, the Joint Chiefs of Staff ordered SAC to place one eighth of the available bombers on airborne alert, but to make it “quiet and gradual.”¹⁰⁹ Strategic Air Command’s ability in this instance to slowly raise alert levels achieved two goals simultaneously: improving military readiness and lowering the risk that the Soviet Union would perceive U.S. actions as a precursor to a major attack. Additionally, President Kennedy was impressed that NATO Supreme Commander, Gen. Lauris Norstad, had carried out his orders to increase his forces’ readiness levels as quietly as possible to avoid unnecessarily inflaming international tensions.¹¹⁰

This example indicates the value U.S. policymakers should attach to nuclear forces that can increase their readiness levels non-visibly or at least with few outward indicators. Such characteristics provide additional options to senior leaders who may want to prepare for the possibility of an attack, but without appearing to the adversary like a U.S. preemptive attack is imminent. Then-Commander of United States Strategic Command (USSTRATCOM), ADM Charles Richard, testified about the need for a “low yield, non-ballistic capability that does not require visible generation” not currently in the U.S. inventory, a list of characteristics he indicated would be fulfilled by pursuing the nuclear-armed sea-launched cruise missile (SLCM-N).¹¹¹ Capabilities that do not require visible generation can also play a significant role in assuring allies during a crisis or conflict, especially when the United States may want

¹⁰⁹ Strategic Air Command, *Chronology of SAC Participation in the Cuban Crisis* (Offutt AFB, NE: Strategic Air Command, December 21, 1962), p. 5. Available via the Digital National Security Archive collection: Nuclear History I, 1955-1968.

¹¹⁰ May and Zelikow, *The Kennedy Tapes*, op. cit., p. 338.; See also, United States Air Force in Europe, *Chronology of the Cuban Crisis for the Period 6 October thru November 1962*, op. cit., pp. 8-10.

¹¹¹ Charles Richard, as quoted in, “Senate Armed Services Committee Hearing: Nuclear Weapons Council,” *STRATCOM.mil*, May 4, 2022, available at <https://www.stratcom.mil/Media/Speeches/Article/3022885/senate-armed-services-committee-hearing-nuclear-weapons-council/>.

to reduce the risk of adversary misperceptions that might result from a more visible force generation.

2. *Greater reliance on nuclear weapons in U.S. strategy, including the perceived need to employ them early in a conflict, may be the price to pay for insufficient conventional forces to deter and defeat opportunistic aggression.*

American civilian and military officials during the time of the Cuban Missile Crisis were quite open about the fact that the United States would likely employ nuclear weapons early in a conflict to defeat Soviet aggression in Europe due to a significant comparative disadvantage in conventional forces.¹¹² The Eisenhower Administration made a conscious decision to rely on nuclear weapons for this deterrence and warfighting task in Europe in large part because nuclear weapons were a cheaper alternative to conventional forces—a justification carried through to the Kennedy Administration.

Similarly, U.S. leaders today may be forced to rely more on nuclear weapons to make up for conventional inferiority in the face of opportunistic or coordinated aggression should they continue pursuing a “one major war” conventional force sizing construct.¹¹³ As both the Congressionally-mandated and bipartisan 2023 Strategic Posture Commission and the 2024 National Defense Strategy Commission noted, a “one major war” force sizing construct is inadequate in the face of opportunistic and coordinated aggression.¹¹⁴ The 2023 Strategic Posture Commission in particular noted that, “The threat of conflicts with China and Russia requires significantly increased U.S., allied, and partner investments in fielding and optimization of conventional forces; without these necessary enhancements to the conventional force, an increased reliance on the nuclear deterrent is likely.”¹¹⁵

What might increased reliance on nuclear weapons look like in U.S. defense strategy? In some instances, it may mean employing nuclear weapons to defeat adversary conventional attacks or shift the military balance in the U.S. favor.¹¹⁶ In other instances, increased reliance on nuclear weapons may be manifest in more frequent and more prominent deterrence signaling with nuclear forces, whether via changes in alert status, force movements, weapons

¹¹² Maxwell D. Taylor, as quoted in, U.S. Senate, *Nominations of Gen. Maxwell D. Taylor and Gen. Earle G. Wheeler*, op. cit., p. 4.

¹¹³ For more on this topic, see, David J. Trachtenberg, *The Demise of the “Two-War Strategy” and Its Impact on Extended Deterrence and Assurance* (Fairfax, VA: National Institute Press, June 2024), *Occasional Paper*, Vol. 4, No. 6, available at <https://www.nipp.org/wp-content/uploads/2024/06/Vol.-4-No.-6.pdf>.

¹¹⁴ Madelyn R. Creedon and Jon L. Kyl, Chair and Vice Chair, *America’s Strategic Posture: The Final Report of the Congressional Commission on the Strategic Posture of the United States* (Alexandria, VA: Institute for Defense Analyses, 2023), p. 28, available at <https://www.ida.org/-/media/feature/publications/a/am/americas-strategic-posture/strategic-posture-commission-report.ashx>; and, Jane Harman and Eric Edelman, Chair and Vice Chair, *Commission on the National Defense Strategy* (Washington, D.C.: RAND, July 2024), p. 37, available at <https://www.rand.org/nsrd/projects/NDS-commission.html>.

¹¹⁵ Creedon and Kyl, *America’s Strategic Posture*, op. cit., p. 28.

¹¹⁶ For more on this topic as it relates to a Taiwan scenario, see, Greg Weaver, *The Role of Nuclear Weapons in a Taiwan Crisis* (Washington, D.C.: The Atlantic Council, November 2023), p. 12, available at <https://www.atlanticcouncil.org/wp-content/uploads/2023/11/Weaver-Role-of-Nuclear-Weapons-in-Taiwan-Crisis.pdf>.

uploading, or other measures. While U.S. leaders would almost certainly prefer to deter and defeat adversaries' conventional attacks with their own conventional forces, the global nature of U.S. alliances and the reluctance of post-Cold War U.S. leaders to adopt a "two major war" force sizing construct for conventional forces necessarily forces the choice between three options: drastically reducing alliance commitments, right-sizing conventional forces to meet new threats, or increasing reliance on nuclear weapons.

3. *Internal and external factors may pressure U.S. leaders to adopt riskier warfighting strategies to end an ongoing conflict on favorable terms relatively early so that other adversaries contemplating opportunistic aggression are more likely to be deterred from attacking.*

Throughout the Cuban Missile Crisis, both domestic advisors and foreign leaders recommended President Kennedy adopt military courses of action against the Soviet bases in Cuba for two main benefits: first, larger military options would be more likely to prove decisive successfully and quickly, and second, a militarily decisive victory in one theater may improve the credibility of U.S. deterrence threats against opportunistic aggression in the eyes of adversaries in other theaters. Chief of Naval Operations ADM George Anderson and CJCS Maxwell Taylor agreed that taking overwhelming military action against the Soviets in Cuba would help deter the Soviets from taking Berlin in response.¹¹⁷

What should U.S. leaders learn from this insight? First, they should understand, as the Kennedy Administration did, that U.S. deterrence threats and actions in one theater will likely have a significant impact on other leaders' perceptions, both adversaries and allies. When facing opportunistic aggression, U.S. leaders are almost certain to field calls from officials internally and allies externally that recommend adopting potentially riskier military strategies that prioritize decisive and early defeat of the adversary—potentially involving U.S. nuclear first use—in the first conflict, in a bid to improve the credibility of U.S. deterrence threats against opportunistic aggression elsewhere in the world. While U.S. nuclear first use could in some circumstances lead to an adversary's nuclear response and an escalatory spiral, escalation is not necessarily a given.¹¹⁸ A U.S. nuclear first use, in fact, may decisively alter the potential opportunistic aggressor's decision calculus concerning his perception of U.S. capability and will to resist aggression on behalf of its allies. Neither outcome is certain, of course, but the point is that U.S. leaders may find the strategic logic behind nuclear first use as more likely to achieve the desired political outcomes than continuing a potentially doomed conventional conflict and risking the dissolution of the U.S. global network of alliances.

If U.S. and allied leaders view the deterrence of opportunistic aggression as a vital national interest, then U.S. leaders should consider adapting their non-strategic nuclear force

¹¹⁷ May and Zelikow, *The Kennedy Tapes*, op. cit., p. 179.

¹¹⁸ For additional analysis on the reasons why nuclear war might stay limited in some circumstances, see, Matthew R. Costlow, *Restraints at the Nuclear Brink: Factors in Keeping War Limited* (Fairfax, VA: National Institute Press, July 2023), available at <https://nipp.org/wp-content/uploads/2023/07/OP-Vol.-3-No.-7.pdf>.

posture to provide additional regional nuclear options.¹¹⁹ These forces are especially important both for deterrence purposes and potentially for warfighting purposes because they are generally lower in nuclear yield than strategic forces; they allow strategic forces to be held in reserve to deter further escalation; and they can be employed selectively from within the theater of conflict, potentially providing an added incentive for the adversary to keep the conflict confined geographically.¹²⁰ The U.S. B61-12 nuclear gravity bomb as a non-strategic weapon is at a distinct disadvantage compared to Russia's nonstrategic nuclear arsenal and is not ideal for the ocean-dominated Indo-Pacific region.¹²¹ While SLCM-N can make an important contribution to U.S. deterrence of opportunistic and coordinated aggression in this regard, a greater variety of non-strategic nuclear forces beyond the addition of SLCM-N may be necessary to improve the credibility of U.S. threats. That is, the United States and its allies may face such severe conventional and nuclear force imbalances in the geographically separate European and Indo-Pacific regions that adversaries believe the United States is unlikely to uphold its alliance commitments in multiple theaters simultaneously. In that case, major additions to the U.S. non-strategic nuclear force may be required to overcome the perceived advantages adversaries may see in opportunistic or coordinated aggression against an overstretched United States.

Conclusion

The Cuban Missile Crisis yields relevant lessons for U.S. leaders as they seek ways to adapt the military to better deter the threat of opportunistic or coordinated aggression: flexible military forces contribute to better tailored deterrence threats and the reduced risk of adversary misperceptions; inadequate conventional forces may incentivize U.S. leaders to increase reliance on nuclear weapons; and, U.S. political and military leaders will likely field recommendations, including from allies, to adopt riskier military strategies, potentially including nuclear first use, to conclude an ongoing conflict quickly and thus improve the credibility of its deterrence threats against adversary opportunistic aggression elsewhere in the world. Even granting that history is unlikely to repeat itself exactly, U.S. officials can still learn important and relevant lessons from the Cuban Missile Crisis that can inform their efforts in fielding the forces necessary to deter and defeat opportunistic and coordinated aggression.

¹¹⁹ This recommendation is in line with the 2023 Strategic Posture Commission. See Creedon and Kyl, *America's Strategic Posture*, op. cit., p. 49.

¹²⁰ For elaboration on these points, see, Matthew R. Costlow, "Deterring and Responding to Escalation: What the US Needs and Why," chapter in, *Relearning Escalation Dynamics to Win the New Cold War* (Washington, D.C.: The Hudson Institute, September 2024), pp. 12-16, available at <https://s3.amazonaws.com/media.hudson.org/Relearning+Escalation+Dynamics+to+Win+the+New+Cold+War.pdf>.

¹²¹ On Russia's advantages in non-strategic nuclear weapons, see, U.S. Department of Defense, *Nuclear Posture Review* (Washington, D.C.: Department of Defense, 2018), p. 9, available at <https://media.defense.gov/2018/feb/02/2001872886/-1/-1/1/2018-nuclear-posture-review-final-report.pdf>.

RECOMMENDATIONS ON ADAPTING U.S. MILITARY FORCES TO DETER AND DEFEAT OPPORTUNISTIC AND COORDINATED AGGRESSION

*Postponing a fight until after one has been outmaneuvered is practiced only by democracies.*¹²²

~ Nicholas John Spykman, 1942

Summary Recommendations

Given the growing threats of opportunistic and coordinated aggression and the lessons taught by the Korean War and Cuban Missile Crisis described earlier, there are a number of summary recommendations that broadly outline the capabilities U.S. policymakers should consider to strengthen deterrence, assurance, and the ability to achieve objectives should deterrence fail.

Strategic Nuclear Forces

U.S. strategic forces serve as the final backstop to escalation, the ultimate threat to any adversary or set of adversaries that there are no scenarios in which the benefits will outweigh the costs of engaging in a general nuclear war. Deterring and defeating opportunistic and coordinated aggression begins with the U.S. ability to conduct major counterforce campaigns against any adversary in any scenario, even under the worst circumstances in which the United States is caught by surprise in a first strike. Or, as a prominent bipartisan senior-level working group stated, "...the United States must always be capable of inflicting intolerable costs on a peer nuclear adversary—even after a preemptive strike on its forces and a follow-on large-scale exchange. The temptation for others to exploit that vulnerability could be disastrous."¹²³ Strategic forces provide the "strong and silent umbrella" that Gen. LeMay said was crucial in allowing the United States to deploy its conventional forces knowing that there was a deterrent to adversary escalation.¹²⁴

While there are a host of factors that U.S. strategic nuclear force planners must account for, the significant growth in Chinese nuclear forces and the growing partnership between China and Russia should be primary drivers for U.S. strategic force posture changes. U.S. policymakers should consider, in this regard, uploading additional nuclear warheads on U.S. intercontinental ballistic missiles (ICBMs), loading submarine-launched ballistic missiles

¹²² Nicholas John Spykman, *America's Strategy in World Politics: The United States and the Balance of Power* (New York: Harcourt, Brace and Company, 1942), p. 161.

¹²³ Roberts, et al., *China's Emergence as a Second Nuclear Peer*, op. cit., p. 40.

¹²⁴ Curtis LeMay, as quoted in, Watson, "LeMay says Cuba Crisis Taught Five Key Lessons," op. cit.

(SLBMs) in tubes that were converted under the New START Treaty, and procuring at least four additional Columbia-class submarines beyond the program of record. Strategic bombers will likely be in high demand during a conflict involving the threat of opportunistic aggression given their conventional and nuclear roles and ability to serve as visible deterrence signaling tools. Policymakers should therefore consider procuring additional B-21 bombers beyond the program of record. Moreover, as the U.S. experience during the extended alert in the Cuban Missile Crisis demonstrated, U.S. strategic forces should be able to operate on alert for an extended period of time—a particularly difficult task for strategic forces that have not yet been modernized under the current program of record. To aid in practicing for this scenario and to improve survivability, the United States should deploy a portion of the B-21 bomber force on alert.

Regional Nuclear Forces

Since the U.S. ability to project power from its homeland may be degraded to some degree by adversary attacks during a conflict, and facing the threat of opportunistic aggression, forward-deployed regional U.S. nuclear forces will be critical capabilities for deterrence, assurance, and achieving objectives should deterrence fail. The United States can raise the alert level or make force posture adjustments in a second theater as a deterrence threat against a potential opportunistic aggressor, a role that U.S. conventional forces may be less able to fill if they are needed elsewhere or have difficulties and delays deploying from the U.S. homeland. SLCM-N will be valuable in this regard because it can be a survivable and persistent presence. Additionally, given the USEUCOM experience during the Cuban Missile Crisis and the U.S. leadership's desire to raise military readiness without provoking Soviet reaction, SLCM-N represents the ideal nonvisible generating capability to reduce the risk of adversary misperception.

That said, there is also great value in a nuclear-armed, land-based, mobile, long-range system—a capability not currently in the U.S. program of record. A nuclear-armed variant of the U.S. Army's Long-Range Hypersonic Weapon, or Dark Eagle, could potentially provide these characteristics. It would be especially valuable as a capability that can be deployed in theater before a crisis or conflict erupts as a deterrent, as well as surged to the theater during a crisis or conflict to signal U.S. resolve, assure allies, replace capabilities that were destroyed in the initial attack, and, if needed, employed to limit damage or weaken adversary advantages.¹²⁵ Additionally, if the United States is likely to rely more on its nuclear forces in the face of opportunistic or coordinated aggression, then the President, based on historical precedent, will likely value multiple theater-based capabilities that offer a range of effects, deployment options, signaling capabilities, and other characteristics that can be tailored to best match the political objectives. This may indicate the value of another capability not currently in the U.S. nuclear arsenal: a mobile, land-based, short- to medium-range, ballistic

¹²⁵ On the allied desire for U.S. damage-limitation capabilities, see, Masashi Murano, *The 2023 Strategic Posture Commission Report From a Japanese Perspective* (Fairfax, VA: National Institute Press, January 6, 2025), *Information Series*, No. 610, especially pp. 2-3, available at <https://nipp.org/wp-content/uploads/2025/01/IS-610.pdf>.

or hypersonic system, with a low-yield warhead that is deployable in theater. A President may value multiple options under the broad category of regional nuclear weapons (battlefield up to intermediate-range) to keep a conflict confined geographically and avoid homeland-to-homeland exchanges—a clear implication derived from the cases of the Korean War and Cuban Missile Crisis.

Missile Defense

Improved and expanded U.S. homeland missile defense would be critical in supporting a number of roles in deterring and defeating opportunistic and coordinated aggression. For example, adversaries are potentially more likely to perceive U.S. nuclear employment threats as credible if the United States has the ability to degrade or defeat an adversary's missile attack. That is, an adversary may be less willing to threaten strikes on the U.S. homeland if he believes his attacks would fail in some significant way *and* potentially elicit an unacceptably costly U.S. nuclear response—the worst of both worlds. The U.S. ability to defeat coercive attacks via missile defense is also likely to aid in assuring allies that the United States will be a reliable security partner despite the myriad of threats it faces. Additionally, a robust homeland missile defense system that protects key power projection sites will not only aid deterrence but also allow a more effective U.S. response should deterrence fail, by limiting damage.

Another important, though less discussed, role for homeland missile defense is its potential effect on an adversary's willingness to escalate a regional conflict to a conflict involving homeland-to-homeland strikes. If the United States relies more on its regional nuclear forces to deter and defeat opportunistic or coordinated aggression, then it should expect an increased risk of an adversary escalating a regional nuclear exchange to conducting strikes on the U.S. homeland. This strategy is, of course, inherently risky for adversary leaders who will likely be seeking assurances from their military planners that such strikes will both achieve their intended effect and not invite an unacceptable U.S. response. Expanded and improved U.S. homeland missile defenses may be critical in affecting the adversary's decision calculus concerning the likelihood of the initial attack's success—making it seem too risky given the potential cost and ultimately discouraging a regional conflict from expanding geographically, thus reducing the risk of escalation.

Regional missile defenses are also likely to play a key role in deterring or defeating opportunistic or coordinated aggression. If an adversary seeks a relatively rapid *fait accompli* against a U.S. ally, then U.S. regional missile defenses can potentially provide enough protection of critical assets to allow the ally and forward-deployed U.S. forces to mount a successful defense—providing additional time for reinforcements to arrive from the U.S. homeland. While the missile defense interceptor inventory will be limited, those systems can potentially provide enough defense of key assets that an adversary likely will be discouraged from attacking in the first place given all the other risks. As in the case of homeland missile defenses, regional missile defenses act as deterrents in and of themselves, and enablers of conventional and nuclear deterrence threats. Or, as the scholar Benson

Adams stated, “If the attacker thinks he has a way to neutralize the deterrent, the deterrent no longer deters.”¹²⁶

The priority short-term investments U.S. officials should consider include expanding cruise missile defense of the U.S. homeland, accelerating the Glide Phase Interceptor program to defeat hypersonic targets, and investing in terminal phase defenses for critical infrastructure against ballistic missile attacks. Over the longer term, the United States should develop, rigorously test, and deploy a distributed space-based ballistic missile defense system, including the necessary sensor and communication layers. Even the early phases of this effort, when coverage is not complete or optimal, can contribute significantly to deterrence by complicating adversary planning and potentially reducing the perceived utility of coercive threats. Moreover, a layered homeland missile defense system would provide another risk reduction capability during a crisis or conflict, a mission that U.S. political and military officials valued highly during the Korean War and Cuban Missile Crisis, by being able to neutralize accidental or unauthorized adversary missile launches. Finally, the United States and its allies should jointly invest in an increased industrial capacity to develop, test, and deploy regional missile defenses to better cope with the dynamic threats of opportunistic and coordinated aggression.

Conventional Forces

Both the Korean War and the Cuban Missile Crisis demonstrate the value of sufficient U.S. conventional forces and the risks that insufficient conventional forces incur. Regrettably, conventional forces are also the costliest capabilities—perhaps the primary reason why the United States has avoided adopting a “two major wars” force planning construct. If, as seems likely currently, the United States continues to maintain something less than a “two major wars” construct, then U.S. policymakers should consider force posture changes to best position U.S. conventional forces to deter and defeat opportunistic and coordinated aggression. The main force planning principle in this regard is focusing U.S. efforts on those capabilities that are its comparative advantage. Stated differently, the United States should focus on deploying conventional forces that provide capabilities that regional allies do not have or perhaps do not have in the required quantities. The United States, for instance, has unparalleled long-range strike forces, intelligence, surveillance, and reconnaissance (ISR), and airlift—whereas regional allies can provide infantry and land transport capabilities that best complement U.S. forces at scale and quickly.

Conclusion

While the United States and its allies have faced threats of opportunistic and coordinated aggression in the past, today’s emerging political and military entente among China, Russia, North Korea, and Iran is uniquely dangerous. The United States now faces an unprecedented

¹²⁶ Benson D. Adams, “In Defense of the Homeland,” *Proceedings*, Vol. 109/6/964 (June 1983), p. 50.

set of threats: two peer nuclear adversaries in China and Russia; their regional partners, North Korea and Iran, a nuclear-armed state and a nuclear threshold state, respectively; and, the increasing likelihood that their shared revisionist interests could lead to sequential or simultaneous attacks on the United States and its allies in geographically distant theaters. The United States and allies have heedlessly added to these threats by being late to recognize their severity and adapt their policies and military postures to match the expanding deterrence requirements. Absent a major shift in U.S. and allied policies and military postures, China, Russia, North Korea, Iran, or some combination, might sense a window of opportunity to advance their bellicose agendas.

The Korean War and the Cuban Missile Crisis are still relevant examples that U.S. and allied leaders should learn from as they consider how best to adapt their militaries to meet the new pacing threats of opportunistic and coordinated aggression. While this task will no doubt be a generational undertaking, U.S. and allied efforts must match the scope and scale of the threats or risk deterrence failure, perhaps in multiple theaters simultaneously. The United States should apply the lessons learned from history to size and posture its strategic nuclear forces, regional nuclear forces, homeland and regional missile defenses, and conventional forces to counter the unique dangers that opportunistic and coordinated aggression pose. Deterring these new pacing threats requires U.S. and allied leaders to replace their complacency with urgency, and exchange their inaction for action.

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ANALYSIS

THINKING ABOUT RUSSIAN NUCLEAR WEAPONS THINKING

Christopher A. Ford

Introduction

There was a time, not too long ago, when leaders in Washington and in Moscow enjoyed the unaccustomed luxury of looking at each other without fear and anxiety. After the end of the Cold War, American leaders professed themselves committed—as President Bill Clinton’s 1994 *National Security Strategy* phrased it, to helping “support and ... consolidate democratic and market reforms” in the newly-democratic Russian Federation of that period in ways that would “turn a former threat into a region of valued diplomatic and economic partners.”¹ It was, therefore, said to be a key U.S. objective to “accelerate Russian membership on commercial terms in key economic organizations such as the WTO and the Paris Club ... [and] support ... Russia’s integration into various international economic institutions.”²

This was not merely a partisan belief, for President George W. Bush agreed, happily noting in his 2002 State of the Union Address to Congress that “America is working with Russia ... in ways we never have before, to achieve peace and prosperity.”³ The Russian Federation, it was in those days still believed, was “in the midst of a hopeful transition, reaching for its democratic future and a partner in the war on terror.” Indeed, it was “the hallmark of our relationship with Russia” that we had “moved from confrontation to cooperation.”⁴

Nor was this merely how the Americans saw things. The Russian government of Boris Yeltsin reciprocated such warmth. In his remarks to the United Nations Security Council in January 1992, for instance, Yeltsin made clear that he saw an opportunity for Washington and Moscow—and indeed other countries—to work together “to put an end to despotism and to dismantle the totalitarian order, whatever shape it may take.” In this new era, he said, the former Cold War antagonists had overcome their rivalry: “Russia considers the United States and the West not as mere partners but rather as allies.”⁵

¹ *A National Security Strategy of Engagement and Enlargement*, February 1994, available at <https://history.defense.gov/Portals/70/Documents/nss/nss1994.pdf?ver=YPdbuschbfpPz3tyQQxaLg%3d%3d>.

² *A National Security Strategy for a New Century*, May 1997, from Part III, available at <https://history.defense.gov/Portals/70/Documents/nss/nss1997.pdf?ver=2whGiEUYiceAyme45GiJzA%3d%3d>.

³ George W. Bush, State of the Union Address (January 29, 2002), available at <https://georgewbush-whitehouse.archives.gov/news/releases/2002/01/20020129-11.html>.

⁴ *National Security Strategy of the United States of America*, September 2002, from introductory letter & p.13, available at https://history.defense.gov/Portals/70/Documents/nss/nss2002.pdf?ver=oyVN99aEnrAWijAc_O5eiQ%3d%3d.

⁵ Boris Yeltsin, remarks to the U.N. Security Council, in “U.N. Security Council, Provisional Verbatim Record of the Three Thousand and Forty-Sixth Meeting,” S/PV.3026, January 31, 1992, available at <https://www.securitycouncilreport.org/atf/cf/%7B65BFCF9B-6D27-4E9C-8CD3-CF6E4FF96FF9%7D/RO%20SPV%203046.pdf>.



It is thus not altogether surprising that in those years considerable strides were made in arms control and in the reduction of nuclear armaments. Arms reductions had begun with the Intermediate-range Nuclear Forces (INF) Treaty⁶ as Cold War tensions had begun to wane in the late 1980s, and they picked up pace with the Strategic Arms Reduction Treaty (START)⁷ in 1991 and the reciprocal unilateral promises of the Presidential Nuclear Initiatives of 1991-92.⁸

Unfortunately, however, all of this seems a terribly long time ago, with Russia under Vladimir Putin having subsequently emerged as a congenital arms control violator and now being involved both in building up Russia's theater-range nuclear forces and in a ferocious campaign of nuclear saber-rattling intended to intimidate the West into allowing it to invade and annex the independent democracy of Ukraine.⁹ Far from being a context in which "the easing of international tension and the strengthening of trust between States"¹⁰ is facilitating progress toward disarmament, today's world is a steadily *more* threatening place. Accordingly, as the *Wall Street Journal* recently proclaimed, "the Bomb is back."¹¹

In this context, it is vital to understand as much as we can about how Russia thinks about nuclear weaponry. This paper attempts to contribute to such understanding by comparing modern Russian nuclear weapons thinking to that of Soviet times, and by suggesting three different conceptual "framings" that may help make some sense of how the Kremlin has in recent years approached these issues. These three framings—specifically, (1) nuclear posture as guided by game theory, (2) nuclear policy as driven by geopolitical status-seeking, and (3) nuclear weapons as the object of a sort of cultish fixation—are not offered as mutually-exclusive alternative explanations for the Putin regime's nuclear behavior. It may be, for instance, that they *all* influence Russian policy to some extent, albeit perhaps to varying degrees. They are offered here as conceptual organizing devices to help the reader

⁶ Treaty Between The United States Of America And The Union Of Soviet Socialist Republics On The Elimination Of Their Intermediate-Range And Shorter-Range Missiles (INF Treaty), December 8, 1987, available at <https://2009-2017.state.gov/t/avc/trty/102360.htm>.

⁷ Treaty Between The United States Of America And The Union Of Soviet Socialist Republics On Further Reduction and Limitation of Strategic Offensive Arms (START I), July 31, 1991, available at https://media.nti.org/documents/start_1_treaty.pdf.

⁸ See generally, for example, Susan J. Koch, "The Presidential Nuclear Initiatives of 1991-1992," National Defense University, Case Study Series no. 5, September 2012, available at https://ndupress.ndu.edu/portals/68/documents/casestudies/cswmd_casestudy-5.pdf. It has been estimated that the United States previously had nearly 5,000 tactical nuclear weapons deployed overseas. See, for example, "The Presidential Nuclear Initiatives (PNIs) on Tactical Nuclear Weapons at a Glance," Arms Control Association, July 2017, available at <https://www.armscontrol.org/factsheets/pniglance>.

⁹ See generally, for example, Christopher A. Ford, "Dead or Deferred? Nuclear Arms Control in the Age of Revisionism," in *Aligning Arms Control with the New Security Environment* (Center for Global Security Research, 2024), pp.49-52, available at https://irp.cdn-website.com/ce29b4c3/files/uploaded/Ford_in_CGSR_Arms_Control_Book.pdf.

¹⁰ Treaty on the Non-Proliferation of Nuclear Weapons, July 1, 1968, from the Preamble, available at <https://disarmament.unoda.org/wmd/nuclear/npt/text/>.

¹¹ Laurence Norman, Daniel Kiss, Ming Li, & Peter Saidel, "The Bomb Is Back as the Risk of Nuclear War Enters a New Age," *Wall Street Journal*, January 13, 2025, available at https://www.wsj.com/world/nuclear-bomb-weapons-war-explained-01d6e397?mod=hp_featst_pos4.

better understand particular *aspects, themes, or tendencies* in Moscow's nuclear weapons thinking.

The Soviet Strategic Mindset

On the whole, in ideological and doctrinal terms—and both with respect to nuclear weaponry and more broadly—the old Soviet Union seems to have had a remarkably “offensive” strategic mindset. As Andrei Kokoshin has noted, moreover, Soviet and Russian thinking on “deterrence” in the aggression-dissuasive Western sense—that is, about establishing conditions that will persuade a potential adversary to abjure aggression on the grounds that the price it will pay for attack is likely to outweigh any benefit it might hope to gain—remained notably underdeveloped at least through the 1990s.¹²

What is also striking is just how sanguine Soviet leaders seemed to be, at least in the earlier phases of the Cold War, about the prospect of nuclear weapons use. In the Stalin era, for instance, Soviet theorists had a concept of “permanently operating factors” and the “correlation of forces” that would decide the outcome of war.¹³ The aggregative quality and seeming automaticity of these dynamics—perhaps a conceptual outgrowth of Marxian dialectics, which tended to see the relationships between underlying forces as architectonic, with the particulars of human agency being of secondary importance—may have led them to downplay the significance of any single factor in determining results, nuclear weaponry included.

Particularly since it was also one of the key substructures of Soviet doctrine to assume that a general war would inevitably end capitalism¹⁴—and that, *pace* Joseph Stalin, such a climactic global conflict was inevitable—this may have encouraged Soviet planners to downplay both the awfulness and the relative importance of nuclear weaponry in warfare.¹⁵ From the 1950s into the 1970s, Soviet military writings—including those by the Minister of Defense himself—pooh-poohed the likely impact of a nuclear war and urged their readers not to “exaggerate it.”¹⁶

This was accompanied, moreover, by a pronounced offensive mindset. With Soviet doctrine insisting that it would be the overall military correlation of forces that would be decisive in war, it was felt important to take the strategic offensive wherever possible to destroy as many enemy forces as one could, and thus improving the correlation of forces that

¹² Andrei A. Kokoshin, *Soviet Strategic Thought, 1917-91* (MIT Press, 1999), p. 4.

¹³ It was, for instance, a key objective for Soviet forces “to do maximum damage to the enemy forces in order to exhaust them and thus to improve the correlation of forces in the Soviet Union’s favor.” Kokoshin, *op. cit.*, p. 167 (quoting Zhukov, *Vospominaniya i razmyshleniya*, p. 218).

¹⁴ *Ibid.*, p. 115.

¹⁵ *Ibid.*, p. 116 (noting that Stalin had an ideological “concept of ‘permanently operating factors,’ which played down the significance of nuclear weapons”).

¹⁶ See *Ibid.*, p. 115. Apparently the Soviet embassy in Tokyo had also concluded that Japanese officials had exaggerated the impact of the atomic bombs on Hiroshima and Nagasaki in order to justify Japan’s surrender. “*Tragediya Hirosimy I Nagasaki. Dokumenty*” (The tragedy of Hiroshima and Nagasaki. Documents), *Mezhdunarodnaya zvezda*, no. 8, 1990 (cited in Kokoshin, *op. cit.*, p. 114).

would let one win. Clearly being a rapid way to reduce enemy numbers, nuclear weapons were thus considered a critical tool of warfighting, even if they did not *themselves* directly drive outcomes. Since war with the capitalist world was believed to be inevitable, it was also clearly better to seize the initiative and go on the offensive as quickly as possible in order to seize advantage and seek war termination on favorable grounds.¹⁷

These factors led to a powerful bias in favor of offensive action, both in the period immediately following the Second World War¹⁸ and for many years thereafter. As one standard Soviet military text of the mid-1960s put it,

The last war confirmed the vitality of the fundamental position of Soviet military doctrine, that only as a result of a decisive offensive is it possible to destroy the armed forces of the enemy, seize its territory, break down its will to resist, and achieve a decisive victory in war.¹⁹

Nor was this offensive mindset restricted solely to conventional conflict. Quite to the contrary, according to that document:

The imperialists are preparing for an offensive war against our country, a war of all-out destruction and the mass annihilation of our people with nuclear weapons. Therefore we must oppose them with decisive, active operations by our armed forces and, in the first, place destructive nuclear strikes by our strategic forces.²⁰

Defense Minister Rodion Malinovsky argued explicitly in the late 1950s that the outcome of war with the West would be determined by whomever was most successful in quickly mounting massed nuclear strikes. On such assumptions, “frustrating a nuclear surprise attack by the enemy and taking the strategic lead at the very beginning of war” was the key to victory. For this reason, Soviet military writings placed a high premium upon nuclear strikes and counterstrikes.²¹

Indeed, even Soviet Premier Nikita Khrushchev argued to the Supreme Soviet in January 1960 that nuclear weapons would be the main way in which modern war is fought.²² By the 1970s and 1980s—as Soviet forces expanded and the Kremlin seemed to be acquiring more options in the event of a cataclysmic exchange—there was less talk about the need for some kind of preemptive nuclear strike and more preparation for large-scale conventional conflict

¹⁷ As Scott Boston and Dara Massicot have recounted, “Russian military theorists retain a strong bias in favor of offensive action. Their view is essentially that at the tactical and operational levels of war, the best defense really is a good offense; if Russian leaders judged that a conflict was inevitable, there would be a strong impulse to seize the initiative and go on the attack.” Scott Boston & Dara Massicot, “The Russian Way of Warfare: A Primer,” RAND Corporation, 2017, p. 3, available at https://www.rand.org/content/dam/rand/pubs/perspectives/PE200/PE231/RAND_PE231.pdf.

¹⁸ Kokoshin, op. cit., 170.

¹⁹ V.D. Sokolovkky, ed., *Voennaya strategiya* (Military strategy), 2nd ed. (Voenizdat, 1963), p. 173 (quoted in Kokoshin, op. cit., p. 172).

²⁰ Sokolovkky, ed., *Voennaya strategiya*, p. 371 (quoted in Kokoshin, op. cit., p. 73).

²¹ Kokoshin, *Soviet Strategic Thought*, pp. 123-24 (citing writings by N.A. Lomov, V.D. Sokolovsky, P.A. Rotmistrov, and others (e.g., N. Lomov, “*Sovetskaya voennaya doktrina*” (Soviet military doctrine), *Vennaya msyl'*, no. 1, 1963, p. 25)).

²² Ibid., pp. 117 & 117 n.189.

with the West.²³ All along, however, there was a strong emphasis on the ways in which strategic—that is, nuclear—strikes would be important in shaping the outcome of a conflict.

This is not to say that in those years the Kremlin was necessarily committed to large-scale nuclear offensive action in war, for some factors may have somewhat tempered Moscow's nuclear enthusiasms. The powerful geographic position that the USSR won for itself by occupying all of Eastern Europe by 1945 and installing Communist client states there in the opening years of the Cold War, for example—coupled with the sheer size of the Red Army's conventional forces, especially when supported by the armies of their new Warsaw Pact vassals—may have helped reduce Moscow's sense of immediate territorial threat. Soviet leaders were also the heirs to and leaders of a global Communist movement that emphasized revolutionary dialectics driven by changes in the means of economic production rather than, say, strictly military operations.

Together, these may have at least somewhat tempered the Kremlin's offensively-minded approach to nuclear posture. After all, if you were a Marxist true believer who thought you were going to win the great world-historical contest of modern geopolitics *anyway*—and if your geographic situation and conventional military posture meant that you faced little concrete prospect of direct invasion from your adversary—there might seem little reason to risk a nuclear war that would devastate you as well as your adversaries. And indeed, such a tempering seems to have occurred after Stalin's death in 1953, upon which the more pragmatic Nikita Khrushchev took the helm in Moscow.

Even Khrushchev was not above nuclear adventurism that nearly led to a catastrophic war, of course—specifically in the form of the Cuban Missile Crisis, when the Soviets covertly deployed medium-range nuclear-armed ballistic missiles into Cuba. That episode seems to have frightened and unsettled his leadership enough, however, to help make direct confrontation with the United States seem highly unattractive.

As a good Communist, moreover, Khrushchev believed that the Soviet Union would in time “bury” capitalism.²⁴ The inevitability of this eventual triumph had been part of the ideological orthodoxy of Communism from the outset. His nuclear adventurism in Cuba arguably had nearly cost him the inevitability of that triumph, and he seems to have realized it.

Rather than focus upon direct head-to-head confrontation, the Soviets from the early 1960s onward seem to have emphasized building client relationships and gaining advantage in the developing world—a push for global position attributable to the surge of Kremlin confidence, described by the historian Christopher Andrew and the Soviet defector Vasili Mitrokhin, that the Soviets and their allies would triumph globally through a combination of economic success and KGB-led political subversion in the Third World *without* the need for direct confrontation with Washington.²⁵

²³ Ibid., pp. 123-24.

²⁴ See, for example, Central Intelligence Agency, “Khrushchev’s ‘We Will Bury You,’” February 2, 1962, available at <https://www.cia.gov/readingroom/docs/CIA-RDP73B00296R000200040087-1.pdf>.

²⁵ See generally Christopher Andrew & Vasili Mitrokhin, *The World Was Going Our Way: The KGB and the Battle for the Third World* (Basic Books, 2005), pp. 8-24.

Soviet Nuclear Posture and Doctrine

To be sure, any such arguable tempering effect only went so far, and none of this prevented the Soviet Union from building a truly enormous nuclear weapons stockpile—and indeed one that substantially exceeded that of the United States. Whereas the U.S. arsenal peaked in about 1967 with approximately 32,000 weapons—a total which fell thereafter to perhaps 22,000 by the end of the Cold War²⁶—the Soviets kept building. By the late 1980s, it has been reported, Moscow had around 40,000 warheads.²⁷

Because both the United States and the USSR built nuclear capabilities that were in most ways broadly similar to each other's and planned in considerable detail for nuclear warfighting, an "Occam's Razor" approach might conclude that both powers must have thought in generally similar terms about doctrinal issues such as mutually assured destruction, managing movement up the "escalation ladder," and counterforce targeting. This is by no means necessarily the case, however, and the structural similarities between the superpowers' nuclear postures may obscure important differences in how the two countries actually thought about nuclear weapons—both in the Cold War and today.

According to Dmitry Adamsky, for example, deterrence "was not a central notion in Soviet strategic thinking and military art due to Moscow's dichotomous attitude toward nuclear war" during the Cold War.²⁸ For a long time, Soviet thinking did *not* tend toward aggression-dissuasive theories of deterrence as Western doctrine did with its notions of "flexible response" and escalation dominance, instead focusing primarily on concepts of massive retaliation.²⁹ As noted earlier, deterrence-type theory remained underdeveloped for decades.³⁰

In fact, in the USSR it was actually not *permitted* to research "limited nuclear war" theories, and Soviet doctrine rejected ideas of escalation dominance, flexible response, or limited nuclear conflict as "a 'monstrous heresy.'"³¹ The Soviets had a theory of how to fight a nuclear war, but their concept was not about deftly trying to manage escalation tensions *en route* to negotiated war termination; it was maximalist in its ambitions and in the toolkit it envisioned employing. The Kremlin

had a coherent nuclear war fighting strategy, which did not differentiate between conventional and nuclear war. ... All nuclear and conventional efforts, of all services,

²⁶ See, for example, U.S. Department of State, "Transparency in the U.S. Nuclear Stockpile," October 5, 2021, available at <https://www.state.gov/transparency-in-the-u-s-nuclear-weapons-stockpile/>.

²⁷ See, for example, Hans Kristensen et al., "Status of World Nuclear Forces," Federation of American Scientists, March 29, 2024 (reproducing chart entitled "Estimated Global Nuclear Weapon Stockpiles, 1945-2024"), available at <https://fas.org/initiative/status-world-nuclear-forces/>.

²⁸ Dmitry (Dima) Adamsky, *The Russian Way of Deterrence: Strategic Culture, Coercion, and War* (Stanford University Press, 2024), p. 21.

²⁹ Adamsky, *The Russian Way of Deterrence*, p. 21.

³⁰ Kokoshin, *op. cit.*, 4.

³¹ Adamsky, *The Russian Way of Deterrence*, p. 21.

on all levels and in all theaters of operations, were seen as interconnected and aimed at producing victory.³²

The degree of ruthless and offensively-focused bloody-mindedness implied in such an approach seems to have waned in the late 1980s, however. In part, this waning may have been related to the increasingly ossified and sclerotic nature of the Soviet technical and industrial economy, and eventually also—with the arrival in power of Mikhail Gorbachev in 1985—to the ascension of a new generation of leadership who painfully understood just how tenuous the domestic bases of Soviet power actually were.

This shift may also have been, in part, a reaction to the dramatic turnaround in American nuclear thinking *provoked* by Moscow's huge nuclear build-up and Third World aggressiveness in the 1970s. By the early years of the Reagan Administration, for example, U.S. military planning had come to include extremely forward-leaning initiatives such as the "Maritime Strategy" of 1982, which sought to deter Soviet aggression by demonstrating that the United States could hold at risk the ballistic missile submarines Soviet admirals sought to protect in underwater "bastions" in their northern seas.³³ For Kremlin leaders weaned on the idea that victory depended upon a favorable "correlation of forces," the prospect of being deprived even of their nuclear second-strike retaliatory capability may have been a daunting prospect. (It was certainly intended to be.)

Whatever the reasons, by the late 1980s Soviet thinking about nuclear weapons seemed to be evolving fast. In 1985, Defense Minister Nikolai Vasilyevich Ogarkov suggested that fighting a thermonuclear war would be irrational, and perhaps even "criminal."³⁴ Under Gorbachev, the Soviets seem to have concluded that a nuclear war could not really have a winner, and senior officials began making statements to this effect in 1986-87; this idea frequently surfaced thereafter in Soviet military writings.³⁵ In 1986, it was also said that nuclear parity with an adversary at high levels was more dangerous than parity at lower ones.³⁶ Such statements—a striking reversal of earlier ideas that the USSR could prevail in

³² Ibid., p. 22.

³³ See, generally, for example, Christopher Ford & David Rosenberg, *The Admirals' Advantage: U.S. Navy Operational Intelligence in World War II and the Cold War* (Naval Institute Press, 2005), pp. 77-108.

³⁴ N.V. Ogarkov, *Istoriya uchit bditel'nosti* (History teaches vigilance) (Voenizdat, 1985), p. 59 (quoted in Kokoshin, op. cit., pp. 56-57).

³⁵ See Ibid., 58-59.

³⁶ Ibid., 141 (recounting that "[a] number of Soviet works published in the 1980s differentiated between military-strategic parity and strategic stability. In his political report at the 27th Party Congress in 1986, Gorbachev noted that the present level of the nuclear balance was too high and posed an equal danger to both sides. The continuation of the nuclear arms race, he asserted, would inevitably increase the mutual danger, to the point that it would no longer be a deterrent. Soviet military leaders soon followed suit. For example, in 1988, Marshal of the Soviet Union D.T. Kulikov wrote that 'further raising the level of parity would not increase the security of either side. Instead it would lead directly to the opposite result.'") (citing *Materialy XXVII s'yezda KPSS* (Materials of the 27th Congress of the CPSU) (Politizdat, 1986), p. 65, and quoting V.G. Kulikov, "O voenno-strategicheskoy peritete i dostatochnosti dlya oborony" (On military-strategic parity and defense sufficiency), *Voennyya mysly*, no. 5, 1985, p. 7).

an arms race³⁷—signaled a clear understanding of the need to avoid conflict with the United States.

The Putin-Era Mindset

But what about Russia today? When in government service in 2019, this author spoke publicly about modern Russia's highly idiosyncratic—and deeply disturbing—fixation, under President Vladimir Putin, upon narratives of national grievance, and the degree to which Russian political iconography is today filled with notions of special status and historical mission, coupled with bitterness toward a hostile outside world that has supposedly conspired to corrupt Russia's unique essence and keep the country down (or even destroy it).³⁸ Those remarks were focused more directly upon nonproliferation policy than upon Russian nuclear weapons thinking more broadly, but that Russian mindset nonetheless has implications that are perhaps even more significant for the latter than for the former.³⁹

Pronouncements of Russian leaders such as Putin, the writings of sometime regime propagandists such as Vladislav Surkov, and analyses by foreign scholarly observers, make clear that Russia has developed its own “myth of exceptionalism.” This myth revolves around the idea of a recurring “salvational role” in the international community won through defiant resistance and stoic martyrdom against endless waves of foreign enemies determined to subjugate and humiliate it.

In this conception, Russia is a distinct civilization having a unique essence and spirit that is constantly under threat from evil foreign forces, both physically and ideologically. These are threats against which Russians must always be vigilant, and in response to which it is necessary to organize politics along authoritarian lines not accountable to democratic or legal check. The Putin regime has also entered into a symbiotic relationship with the Russian Orthodox Church (ROC) in trying to cultivate a state-centered, authoritarian, patriotic nationalism that draws upon Orthodox mysticism and spirituality. In this relationship, the ROC has been sufficiently debased and degraded into a regime cheerleader that its leaders now endorse Putin's war of aggression in Ukraine as part of a broader “Holy War” against the West.⁴⁰

³⁷ Minister of Defense Rodion Malinovksy told the 21st Party Congress in 1959, for instance, that “[t]he traditional vulnerability of the United States has been liquidated forever,” and that “[i]n the future, if the arms race does not end, our superiority will be even greater.” Quoted in Kokoshin, *op. cit.*, p. 121.

³⁸ Assistant Secretary of State Christopher A. Ford, “Ideological ‘Grievance States’ and Nonproliferation: China, Russia, and Iran,” remarks at the Institute for National Security Studies, Tel Aviv, Israel, November 11, 2019, available at <http://www.newparadigmsforum.com/NPFtestsite/?p=2442>. The following pages are based in part upon those remarks.

³⁹ Christopher A. Ford, “Russia, China, and the Challenge of Asymmetry in Nuclear Ethics,” presentation in Albuquerque, New Mexico, September 6, 2024, available at <https://www.newparadigmsforum.com/russia-china-and-the-challenges-of-asymmetry-in-nuclear-ethics>.

⁴⁰ See, for example, Brian Mefford, “Russian Orthodox Church declares ‘Holy War’ against Ukraine and West,” Atlantic Council, April 9, 2024 (quoting ROC Patriarch Kirill), available at

This narrative involves, and indeed requires, finger-pointing at alleged outside threats. It also asserts linkages between those outside threats and those within Russia who have the temerity to disagree with Putin — or, more specifically, the effrontery to suggest that Russians should be offered choices other than his regime. Putin's narrative paints a disturbingly dark, dehumanizing narrative of his domestic opposition, which he describes as a "fifth column" in league with foreign saboteurs, and likens to an infectious bacterium of which Mother Russia must be cleansed.⁴¹

The Putin regime's vision of the world is also bound up with a sense of imperial nostalgia, a longing for the status and sense of historical self-importance that Russia felt during the tsarist period and during its decades of Soviet global reach.⁴² Not for nothing, for instance, has Putin declared that the collapse of the USSR was the 20th Century's "greatest global catastrophe."⁴³

The modern Russian regime thus promotes a kind of global "restoration narrative," in which its self-assertive authoritarianism provides the vehicle for national or even civilizational resurrection. It is critical to this ideology that Russia deserves to be a great power and to exert its influence widely abroad, and it is central to Putin's agenda—as he has proclaimed ever since his so-called "Millennium Message" manifesto of December 1999⁴⁴—that Moscow must put behind it the weakness and humiliations of the 1990s and reclaim its birthright of great power status. This hunger for a return to lost glory lies at the heart of the geopolitically revisionist agenda of what I have called the modern Russian "grievance state."⁴⁵

Developments in Nuclear Weapons Thinking

Adamsky's survey of modern Russian nuclear writings suggests that the historically "underdeveloped" nature of the Kremlin's thinking about deterrence has been quite turned around in recent years. In his telling, although the Soviets had not thought much about nuclear deterrence in the Western sense during the Cold War, they became very serious about trying to learn from Western literature on this topic in the 1990s, at a time when Russia's conventional power seemed feeble. In this context, Russian planners began to explore what we might today call "cross-domain deterrence." In such thinking for instance, nuclear influence—the one thing Russia could still draw upon in those days, not just

<https://www.atlanticcouncil.org/blogs/ukrainealert/russian-orthodox-church-declares-holy-war-against-ukraine-and-west/>.

⁴¹ See Fiona Hill & Clifford G. Gaddy, *Mr. Putin: Operative in the Kremlin* (Brookings Institution, 2015), pp. 241, 254, & 256 (quoting Putin).

⁴² Ford, "Ideological 'Grievance States' and Nonproliferation: China, Russia, and Iran."

⁴³ See, for example, Gregory Carleton, *Russia: The Story of War* (Belknap Press, 2017), p. 202; see also Hill & Gaddy, *Mr. Putin*, p. 56.

⁴⁴ Vladimir Putin, "Russia at the Turn of the Millennium" [*Rossii na nubezhe tysyacheletii*], *Nvzavisimaia gazeta*, no. 4, December 30, 1999, available at <https://pages.uoregon.edu/kimball/Putin.htm>.

⁴⁵ Ford, "Ideological 'Grievance States' and Nonproliferation."

strategically but also especially with regard to the shorter-range weaponry which the United States had dismantled⁴⁶ but Russia had not⁴⁷—could be “maneuvered to the conventional sphere to compensate for Russia’s strategic operational inferiority.”⁴⁸

In this sense, at least, such embryonic Kremlin deterrence thinking roughly paralleled Western thought, inasmuch as the United States itself has long envisioned nuclear threats as a way to forestall attack by the kind of overwhelming conventional adversary seen (for instance) in the Red Army, poised on the inter-German frontier after 1945. So far, so good.

With Russia’s conventional military modernization after its invasion of Georgia in 2008, however, Russian “strategic deterrence” thinking evolved. The objective of this modernization effort was to build for Moscow a “reconnaissance-strike complex” based on information technology, and this push coincided with the development of ideas of what Russian strategists now called “new-generation warfare” (NGW)—an umbrella term loosely analogous to Western “hybrid warfare,” and which referred to “an amalgamation of hard and nonkinetic tools across various domains, namely the coordinated application of military, diplomatic, and economic means.” NGW, in the Russian view, was how powers tried to bring about regime change in their adversaries through exploiting externally-instigated protests, informational subversion, and private military activity, backed by sophisticated conventional and nuclear capabilities.⁴⁹

As Adamsky has recounted, as the Kremlin’s conventional might and confidence grew Russian strategists expanded their deterrence theory “to a wide diapason of domains beyond the nuclear, ranging from the conventional to the informational (cyber) realms and beyond the military sphere *per se*.” The aim was to achieve “merger of these tools into one system” that would improve Russia’s overall coercive capabilities by increasing its ability both to signal and to escalate in various domains and levels, including with long-range conventional precision strikes, non-kinetic engagement, selective damage to military and civilian infrastructure, and limited nuclear strikes.⁵⁰ Putin’s 2014 Military Doctrine⁵¹ codified this into ideas of a nonnuclear deterrence *system*, a repertoire “of foreign policy, military and nonmilitary measures aimed at preventing aggression by nonnuclear means.” Overall, the tendency was “to merge all the emerging tools of coercive influence into one unified system.”⁵²

⁴⁶ See generally, for example, Susan J. Koch, “The Presidential Nuclear Initiatives of 1991-1992,” National Defense University, Case Study Series no. 5, September 2012, available at https://ndupress.ndu.edu/portals/68/documents/casestudies/cswmd_casestudy-5.pdf.

⁴⁷ See, for example, Assistant Secretary of State Christopher A. Ford, “Russian Arms Control Compliance: A Report Card, 1984-2020,” U.S. Department of State, *ACIS Papers*, vol.1, no.10, June 18, 2020, p. 7, available at <http://www.newparadigmsforum.com/NPFtestsite/?p=2641>.

⁴⁸ Adamsky, *The Russian Way of Deterrence*, pp. 24-25 & 38.

⁴⁹ *Ibid.*, p. 26.

⁵⁰ *Ibid.*, p. 27.

⁵¹ President of the Russian Federation, “The Military Doctrine of the Russian Federation,” No. Pr.-2976, December 25, 2014, available at https://rusmilsec.blog/wp-content/uploads/2021/08/mildoc_rf_2014_eng.pdf.

⁵² Adamsky, *The Russian Way of Deterrence*, pp. 27-28.

What has emerged in Russian thinking is, in effect, a holistic and comprehensive “unified field theory” of coercive bargaining. In Adamsky’s characterization,

Russians perceive strategic interaction holistically, as encapsulating a permanent dialectics between two coercive stratagems: “intimidation” or “fear-inducement” (*ustrashenie*), which refers to declaratory signaling and manifestations of resolve and capability, and “forceful deterrence” (*silovoe sderzhivanie*), which refers to a diapason of limited use of force, on the battlefield or beyond, to coerce the adversary and shape his strategic behavior. Implicitly, both stratagems could and should be employed in tandem during peace time, the period of threat[,] and wartime.⁵³

The elements of this Russian schema are not separable, instead merging into and reinforcing each other. Western strategists may think of deterrence as being designed to dissuade aggression, and may envision “escalation ladders” as having crisp and distinct separate “rungs,” with the so-called “nuclear threshold” standing out therein as a step-change of huge game-theoretical consequence. By contrast, however, Adamsky’s account suggests that Russian thinking represents more of a general theory of coercive bargaining, focused upon gaining advantage in either offensive *or* defensive situations rather than upon dissuading aggression *per se*, and envisioning smoother and much more complex multi-variable gradients of escalatory force. In this conception, “when Russia is maneuvering from one domain to another, all tools of influence should merge and then move as one organic whole into the sphere where the main engagement is taking place.”⁵⁴ The aim is to “synthesize nuclear, conventional, and nonkinetic forms of influence” into one overall, holistic framework.⁵⁵

Whereas Western conceptions of deterrence tend to be psychologically passive, moreover—at least in the sense that it is generally their objective to set a baseline of peacetime conditions that incentivize adversary inaction, thus maintaining a generally peaceful *status quo*—Russian thinking is much more active, involving a constant effort to engage with and cause challenges to and “friction” for the adversary. As Adamsky describes it with respect to what is conceived of as “informational deterrence,” for instance, this is “a two-phase endeavor.”

First comes the generation of “detering potential” (*sderzhivaiushcii potentsial*). This is done by means of constant but relatively low-intensity engagement with the adversary. For internal needs, this operational friction *explores* the strategic reality (*i.e.*, examines the adversary, the environment, and oneself), its boundaries, risks, and opportunities. Externally, it fosters a reputation about one’s capabilities and resolve, and generates, figuratively speaking, “detering potential” for prospective employment. The second phase is the leveraging of the preproduced energy

⁵³ Ibid., p. 35.

⁵⁴ Ibid., p. 38.

⁵⁵ Ibid., p. 39.

according to the needs of the moment. ... [This therefore] involves the serial use of limited force to generate an aggregate effect, which can then be exploited as the occasion demands. For a certain period, uninterrupted friction on informational fronts might not serve any specific goal other than to generate and to maintain a generic deterring posture. Eventually, the latter turns into a building block, or even the backbone, of concrete influence leverage when Russian strategists see fit. In sum, persistent operational friction creates a deterring potential, maintains it (*i.e.*, regular recharging), and exploits it to coerce an adversary at the moment of truth.⁵⁶

He uses the term “cumulative deterrence” to cover the way in which Russian concepts of informational deterrence work from a baseline of uninterrupted friction to create a deterrent potential, and thence into leveraging that potential for tactical or strategic advantage via coercive bargaining.⁵⁷

Three “Framings” for Exploring About Russian Nuclear Thinking

With all of this as background, let us thus examine three possible “framings” that may help us understand more about Russia’s nuclear posture today: (1) nuclear posture as guided by game theory; (2) nuclear weapons policy as driven by geopolitical status-seeking; and (3) nuclear weapons as a form of cult.

Possible Game-Theoretical Logics

“Countervalue Overkill”. There are various ways in which a general game-theoretical framing might perhaps help explain Russian nuclear posture. With respect to the *strategic* game-theoretical framing, of course, it is probably analytically impossible to rule out that there *isn’t* actually anything particularly distinctive about Russian nuclear thinking. Both the United States and the Russian Federation, after all, have nuclear “Triads” of land, sea, and air forces that are structured in ways to maximize operational flexibility to national leaders and the survivability of enough second-strike retaliatory forces in the event of enemy attack that the enemy will be deterred from trying one. On that basis, one might perhaps conclude that the two countries must therefore think about nuclear strategy in broadly similar ways.

This cannot be ruled out, but as during the Cold War, such a parallelism of nuclear thinking needs to be empirically demonstrated rather than simply assumed—and there are more than enough differences in context and circumstance to suggest the likelihood of important conceptual divergence between Washington and Moscow. Indeed, particularly in light of the peculiar darkness and vehemence of the Putin-era “strategic mindset”—not to mention some of the dynamics of “theocratization” in nuclear policy discussed below—the

⁵⁶ Ibid., pp. 51-52.

⁵⁷ Ibid., p. 52.

burden of proof should presumably lie with anyone contending that U.S. and Russian leaders “think alike” about nuclear weapons. There seems little real sign that they do.

That said, it is not impossible to imagine an alternative nuclear logic quite different from U.S. thinking but that would still arguably justify the same basic nuclear posture we see in the Russian Federation, albeit on very different grounds. Conceivably, rather than seeing the details of nuclear posture as the outgrowth of complicated calculations about how many warheads would be needed to achieve specific “counterforce” effects—that is, targeting the adversary’s nuclear forces in ways designed to hold those forces at risk for purposes of deterrence and to maximally degrade their ability to inflict harm upon one’s own forces and homeland if deterrence were to fail—it is possible to imagine that a purely “countervalue” logic could justify a posture very much like what the Russians have today.

There is a stereotypical view of “countervalue” targeting—that is, threatening the annihilation of multiple civilian population centers in the adversary’s homeland rather than targeting its nuclear and other military forces as such—in which such an approach requires only a “minimal” force posture (*e.g.*, just enough missiles and warheads to wipe out a handful of cities). If one is sufficiently geopolitically paranoid and bellicosely bloody-minded, however, such minimalist assumptions may not necessarily hold.

Specifically, it is at least possible that a purely countervalue strategy might (more or less) logically call for a very large and diverse Russian nuclear force under at least three conditions. First and most obviously, Russia would have to believe that the best way to deter (or coerce) the United States is to threaten American cities, and therefore to conclude that the most important objective of Russian nuclear strategy is to ensure that there is absolutely no way for the United States ever to ensure those cities’ survival in a conflict.

Second, Russian leaders would have to be both sufficiently paranoid to assume that a U.S. “bolt from the blue” preemptive first strike was quite possible, and convinced that the United States possessed the ability, with such a strike, to radically attrit Russian nuclear forces—perhaps including ballistic missile submarines at sea. (And one should remember here, of course, that it had been the objective of the old U.S. Maritime Strategy to convince Moscow this was the case.) Third, the Kremlin would have to believe American missile defense capabilities are effective enough to be able to protect U.S. cities from a nuclear attack of modest (if still relatively small) proportions.

These three factors, read together, might lead Russian strategists to conclude that a large and diverse Russian nuclear force was necessary in order to implement Moscow’s countervalue strategy against a small number of American cities because of the possibility that the United States would (a) strike preemptively against Russian nuclear forces (*e.g.*, using a mix of nuclear weapons, long-range conventional precision strike systems, and perhaps other weapons) and thereafter (b) rely upon missile defenses to protect the American homeland against the relatively small numbers of Russian nuclear forces that would survive this onslaught.

In this vision, a sizeable Russian force would be needed, but not to ensure Russian strikes against U.S. forces. Instead, the point would be almost comically simple: there would need to be *so many* Russian warheads aimed at a small number of major American cities—that is,

such a huge degree of planned “overkill”—that there would be no way whatsoever that those cities could survive no matter how effective any U.S. first strike was, and no matter how good U.S. missile defenses were.

To observe this is not to argue (much less demonstrate) that this actually *is* the logic behind Russia’s nuclear force posture, of course, for there does not seem to be empirical evidence of such a purely countervalue strategy. If anything, the flexible and holistic nature of Russian thinking about “strategic deterrence” described by Adamsky would seem to point in the opposite direction—that is, away from simple assumptions about or approaches to nuclear coercion, and toward efforts to apply a wide variety of shifting and improvisational coercive responses to changing circumstances. (The complexities recounted by Adamsky do not seem consonant with a simple mantra of “make sure you can kill a few cities no matter what.”) Nevertheless, this is at least a *conceivable* logic, and it is one that could perhaps explain the Kremlin’s longstanding neuralgia about even relatively *ineffective* U.S. missile defense capabilities, as well as Putin’s fixation upon developing new “exotic” strategic systems that are touted as being highly resistant to missile defenses.⁵⁸

Hyperflexible Coercion

To my eye, however, given what we have seen about Russian “strategic deterrence” (*a.k.a.* full-spectrum coercive bargaining) theory, the point of a large nuclear force is more likely not to be the analytically simple task of ensuring massively redundant countervalue target coverage, but rather to be the more interesting one of giving leaders in the Kremlin as diverse, flexible, and “tailorable” a range of coercive tools as possible. Ideally, if one were preparing a force to support a strategy in which—as Adamsky phrases it—“all tools of influence ... merge and then move as one organic whole into the sphere where the main engagement is taking place,”⁵⁹ one would presumably want a large force.

More importantly, however, a Russian planner with that strategy in mind would also want a force that was maximally *flexible*—including not just a large number of assets across a traditional “Triad”-type architecture, but also “exotic” delivery systems intended to create novel warning or defense dilemmas for the adversary, as well as a great diversity of shorter-range systems, with varying yields and effects and with freely interchangeable conventional and nuclear warhead load-outs. (And that’s just the *nuclear* side. Such a Russian strategist would presumably also want a huge range of other capabilities, including conventional weaponry, “active measures” political subversion, economic mechanisms, sabotage and assassination teams, cyberattack, electronic warfare, and other non-kinetic effects, and so on—perhaps even including chemical or biological weaponry, and some ability to task and leverage transnational organized criminal networks.) One would want, in other words, a force posture with maximal flexibility and diversity in order to maximize its ability to

⁵⁸ See, for example, Neil MacFarquhar & David E. Sanger, “Putin’s ‘Invincible’ Missile Is Aimed at U.S. Vulnerabilities,” *The New York Times*, March 1, 2018, available at <https://www.nytimes.com/2018/03/01/world/europe/russia-putin-speech.html>.

⁵⁹ Adamsky, *The Russian Way of Deterrence*, p. 38.

contribute to and support coercion-focused activity across the full range of power and in as great a range of circumstances as possible.

Because of its consistency with Russian doctrinal thinking about coercive bargaining, this logic feels more persuasively explanatory of Moscow's current nuclear posture than it would be to hypothesize a simple "countervalue overkill" approach. In fact, the above description of a "hyperflexible" nuclear force—and indeed an analogously broad repertoire of non-nuclear coercive capabilities—comes very close to describing exactly the kind of force the Russians have built for themselves. This is likely no coincidence.

The "Offensive Umbrella"

But there is at least one additional possible nuclear logic that may have importance in explaining Russian approaches: the logic of the "offensive nuclear umbrella."⁶⁰ This logic envisions the use of nuclear weapons, and especially theater-range systems, in support of a strategy of regional territorial aggression. In contrast to the more "normal" *defensive* way in which Western strategists conceptualize nuclear deterrence, this use of "deterrence" is *offensive* in that it is employed to *facilitate* aggression by deterring third-party states from *responding* to one's effort to invade and annex another country.

Such a logic would explain quite a bit about Russian nuclear-related behavior under Vladimir Putin. Thanks to its refusal to comply with the Presidential Nuclear Initiatives of the early 1990s, as mentioned earlier—as well as Putin's development and deployment of missiles in violation of the Intermediate-range Nuclear Forces (INF) Treaty⁶¹—Russia has a much larger arsenal of theater-range forces than does the United States or any of its NATO allies. Russia uses this force, accompanied by nuclear saber-rattling, in an effort to create operational "space," if you will, in which Putin can invade and annex his neighbors.

In his examination several years ago of Russian precision conventional strike capabilities, Dave Johnson noted that

[t]he assiduous efforts by President Putin and other high-level Russian officials to highlight nuclear weapons in the "psychological background" of the current security environment is one example [of efforts to employ what some Russian strategists call "reflexive control"]. In general, Russia is re-shaping perceptions on the

⁶⁰ See, for example, Christopher A. Ford, "Countervailing Posture, the 'Offensive Nuclear Umbrella,' and the Future of Arms Control," remarks at DACOR Bacon House, Washington, D.C., October 6, 2023, available at <https://www.newparadigmsforum.com/countervailing-posture-the-offensive-nuclear-umbrella-and-the-future-of-arms-control>; Christopher A. Ford "Offensive Nuclear Umbrellas and the Challenge of Modern Strategic Thinking," remarks to the Nuclear Security Working Group (NSWG) Congressional Seminar "Nuclear Security in the 21st Century," February 10, 2016, available at <http://www.newparadigmsforum.com/NPFtestsite/?p=2007>.

⁶¹ Treaty Between The United States Of America And The Union Of Soviet Socialist Republics On The Elimination Of Their Intermediate-Range And Shorter-Range Missiles (INF Treaty), December 8, 1987, available at <https://2009-2017.state.gov/t/avc/trty/102360.htm>. According to former U.S. Under Secretary of State for Arms Control and International Security Rose Gottemoeller, Russian violations of the INF Treaty began in 2008. "Carroll: The enduring nuclear threat," interview with Gottemoeller, *Denver Post*, November 6, 2015. By the late 2010s, Russia had deploying multiple battalions of its new INF-class missile. See, for example, Ford, "Russian Arms Control Compliance," p. 4.

psychological front using a range of political, diplomatic, military, and other activities in order to deter a perceived threat of aggression and to create more favorable conditions for Russia in case of actual conflict.⁶²

With the acceleration of Putin's war against Ukraine in 2022, moreover, Russia has moved its nuclear weapons from the "psychological background" very much into the "foreground." Russian State Duma Chairman Vyacheslav Volodin, for example, has warned that provision of equipment to Ukraine could produce "global catastrophe,"⁶³ and former president Dmitri Medvedev has said Western aid will "bring the nuclear apocalypse closer."⁶⁴ Putin himself has admitted deploying nuclear weapons in Belarus, and warns that if anyone is "thinking of inflicting a strategic defeat on us ... the use of extreme measures is possible."⁶⁵ Such statements seldom *quite* promise nuclear attack, but Medvedev recently came just about as close as anyone has:

Imagine if the ... [Ukrainian] offensive, which is backed by NATO, was a success and they tore off a part of our land then we would be forced to use a nuclear weapon according to the rules of a decree from the president of Russia. There would simply be no other option.⁶⁶

All of this is quite consistent with an "offensive nuclear umbrella" approach. The point is to deter Russia's adversaries, but this is not a *defensive* type of deterrence. It is designed, instead, to deter others (*i.e.*, NATO) from intervening *against* Russian aggression.

Status-Seeking. The second general conceptual framing that it may be useful to consider in thinking about Russian approaches to nuclear weapons relates to great power status-seeking. This idea is fairly self-explanatory, but it is worth stressing that especially in the somewhat chaotic 1990s, after the Soviet collapse, nuclear weapons probably remained the only real reason why the rest of the world still felt Russia to be one of the great powers at all.

It must have galled the Russians decades ago that West German leader Helmut Schmidt referred to the Soviet Union as "Upper Volta with missiles."⁶⁷ If that could be said at the

⁶² Johnson, Dave, "Russia's Conventional Precision Strike Capabilities, Regional Crises, and Nuclear Thresholds," *Livermore Papers on Global Security*, no. 3, February 2018, p. 45, available at <https://cgsr.llnl.gov/sites/cgsr/files/2024-08/Precision-Strike-Capabilities-report-v3-7.pdf>.

⁶³ Andrew Meldrum, "Russia official warns West of 'global catastrophe' for arming Ukraine," *PBS News*, January 22, 2023 (quoting Volodin), available at <https://www.pbs.org/newshour/world/russia-official-warns-west-of-global-catastrophe-for-arming-ukraine>.

⁶⁴ Vladimir Isachenkov, "Russia's security chief blasts West, dangles nuclear threats," *Associated Press*, March 23, 2023 (quoting Dmitri Medvedev), available at <https://apnews.com/article/medvedev-nuclear-putin-arrest-warrant-germany-ukraine-6dcde92e06f41a7c5cb7386f7939df33>.

⁶⁵ "Ukraine war: Putin confirms first nuclear weapons moved to Belarus," *BBC*, June 17, 2023 (quoting Putin), available at <https://www.bbc.com/news/world-europe-65932700>.

⁶⁶ Andrew Osborn, "Russia's Medvedev: We'd have to use a nuclear weapon if Ukrainian offensive was a success," *Reuters*, July 30, 2023, available at <https://www.reuters.com/world/europe/russias-medvedev-wed-have-use-nuclear-weapon-if-ukrainian-offensive-was-success-2023-07-30/>.

⁶⁷ Deborah Welch Larson & Alexei Shevchenko, *Quest for Status: Chinese and Russian Foreign Policy* (Yale University Press, 2019), p. 131; see also Hill & Gaddy, *Mr. Putin*, p. 38.

height of the Cold War, however, it may have seemed even more true—and more irritating—in the 1990s. After the collapse of the USSR, the dismissive wisecracks continued: one journalist, for instance, described the Russian Federation as “Zaire with permafrost,”⁶⁸ and U.S. Senator John McCain called it “a gas station masquerading as a country.”⁶⁹ Given what was described earlier about the Putin regime’s strategic mindset and its fixation upon restoring Russia’s image and status as a great power, it is not hard to see how such sneers would be remembered and resented today—even while helping solidify an almost desperate status-based Russian attachment to nuclear firepower.

For some time, it may indeed have seemed that the only reason anyone respected Russia was its nuclear arsenal. This was, at least, what many Russians seem to have perceived—perhaps leading many to fixate upon nuclear weaponry as essential to Russia’s great-power identity. The Russian scholar Dmitry Suslov, for instance, has argued that strategic parity with the United States was “what distinguishes Russia from the other power poles, including new ones, and what makes it a key player in big-time politics by definition.”⁷⁰

Indeed, Russian officials all but officially admitted this in 2002, when negotiating the Moscow Treaty of 2002⁷¹ with the United States. Significantly, the strategic arms reductions made in that agreement had *already* been announced unilaterally by each power, and would have occurred absent the existence of a treaty. In that sense, therefore, the treaty was unnecessary. Russian officials insisted upon these reciprocal pledges being turned into a legally-binding instrument of nuclear arms control, however, because they “valued the *political symbolism* of signaling that Russia remained a superpower entitled to engage formally with the mighty Americans on such matters.”⁷²

For these reasons, it is plausible to suggest that great power status-seeking is at least *one* driver for Russia’s maintenance of the large and diverse nuclear force that it possesses today.

Nuclear Weapons as Cult. As for my third framing—the idea that Russian nuclear weapons policy can be understood, at least in part, by seeing nuclear weaponry as the object of a sort of cultish fixation by Russia’s elite—it is necessary here to dig a little deeper into the dark and paranoid legitimacy narratives being spun by the Putin regime. In this respect, a valuable—if disturbing—window into Putin’s worldview can perhaps be found in the

⁶⁸ Larson & Shevchenko, op. cit., p. 187.

⁶⁹ Ibid., p. 227.

⁷⁰ Ibid., p. 219.

⁷¹ Treaty Between the United States of America and the Russian Federation On Strategic Offensive Reductions, May 24, 2002, available at <https://2009-2017.state.gov/t/isn/18016.htm>.

⁷² See, for example, Christopher A. Ford, “Dead or Deferred? Nuclear Arms Control in the Age of Revisionism,” in *Aligning Arms Control with the New Security Environment* (Center for Global Security Research, 2024) p. 36 (citing “Nuclear Arms Control: The Strategic Offensive Reductions Treaty,” Congressional Research Service, February 7, 2011, from the Summary, available at https://www.everycrsreport.com/files/20110207_RL31448_bd1c6cee57542178d8ac403eb729970056e8b799.pdf), available at https://irp.cdn-website.com/ce29b4c3/files/uploaded/Ford_in_CGSR_Arms_Control_Book.pdf.

writings of the early 20th Century White Russian émigré Ivan Alexandrovich Ilyin (1883-1954).⁷³

Ilyin is apparently a great favorite of Putin, who quotes frequently from the man and at one point even sent copies of Ilyin's work to Russian government officials, urging them to read it.⁷⁴ Orlando Figes has described Ilyin as the writer "most often cited as the 'key' to Putin's ideology,"⁷⁵ and Walter Laqueur has written that "Putin and his colleagues believe that ... in Ilyin they have found the prophet to present their much-needed new ideology."⁷⁶ Russia's minister of regional development seems to agree, noting that "[t]he demand for his ideas in today's Russia is so strong that sometimes there is a feeling that Ivan Ilyin is our contemporary."⁷⁷

Ilyin, however, was not a nuclear theorist. He was a Russian Orthodox fascist. He openly admired European fascism, worked briefly in Joseph Goebbels' Nazi Ministry of Propaganda in Germany,⁷⁸ and seems to have "considered Nazism a positive phenomenon that with some modifications and adjustments could serve as a model for the future of Russia."⁷⁹ He also nursed a disturbing view of the spiritually cleansing potential of violence when warfare is waged by what he called the "Orthodox knightly tradition" of "Russian warriors of Christian favour."⁸⁰ In this, Ilyin claimed as his spiritual model Jesus casting the moneylenders out of the Temple,⁸¹ which he characterized as an example of the kind of violent "negative love" that all Christians should emulate in suppressing evil and spiritual corruption.⁸² As he saw it, the Orthodox warrior must be willing—even eager—to "transgress the limits of his moral righteousness" in service of a higher good.⁸³

The violence of holy war was, for Ilyin, a "process of purification," and the strong, virtuous warrior should bear "the burden of spiritual compromise, the burden of descending to the grave, violent and cunning means of struggle."⁸⁴ Through such *unrighteous* brutality in the fight against evil, the warrior would "receive[] grace in the sacrament and ... strength for his actions," for this violence "confirms the purpose of his service and cleanses his soul. And his sword itself becomes a fiery prayer."⁸⁵ As I noted about Ilyin last year,

⁷³ See generally Ford, "Russia, China, and the Challenge of Asymmetry in Nuclear Ethics."

⁷⁴ See Anton Barbashin, "Putin's Philosopher: Ivan Ilyin and the Ideology of Moscow's Rule," *Foreign Affairs*, September 20, 2015, available at <https://www.foreignaffairs.com/articles/ukraine/2015-09-20/putins-philosopher>.

⁷⁵ Orlando Figes, *The Story of Russia* (Metropolitan, 2022), p. 287.

⁷⁶ Walter Laqueur, *Putinism: Russia and Its Future with the West* (Thomas Dunne, 2015), p. 178.

⁷⁷ Quoted in Laqueur, *op. cit.*, p. 178.

⁷⁸ Laqueur, *op. cit.*, p. 179.

⁷⁹ *Ibid.*, p. 181.

⁸⁰ Ivan Alexandrovich Ilyin, *On Resistance to Evil By Force* (K. Benois, trans.) (Taxiarch Press, 2018), p. 1.

⁸¹ Matthew 21: 12-14 (King James Version) ("And Jesus went into the temple of God, and cast out all them that sold and bought in the temple, and overthrew the tables of the moneychangers, and the seats of them that sold doves, and said unto them, 'It is written, My house shall be called the house of prayer; but ye have made it a den of thieves.'").

⁸² *Ibid.*, p. 134.

⁸³ *Ibid.*, p. 77.

⁸⁴ *Ibid.*, pp. 203 & 206.

⁸⁵ *Ibid.*, p. 207.

Here we see what might be described as almost a cult of self-exonerating warrior-militancy that exults in the nobility of suffering in an eternal Holy War against evil and spiritual corruption. This is a tradition that surfaces repeatedly in Russian politics, religiosity, and culture. One sees aspects of it, for instance, from the conviction of Ivan IV (“The Terrible”) that he was, in the words of British historian Orlando Figes, “a sword-bearing archangel, an agent sent by God to protect the Orthodox and purge the world of infidels and sinners before the Apocalypse,”⁸⁶ all the way up to Vladimir Putin’s much more recent fulminations about the need to resist “Satanic” Western forces of spiritual pollution that threatened Russia’s ‘traditional values.’⁸⁷

Such glorifications of spiritual conflict and worldly suffering may even trace their roots all the way back to the semi-mythical Boris and Gleb, the first saints of the Russian Orthodox Church. Russian tradition, after all, presents them (*e.g.*, in the 12th-Century Primary Chronicle) as noble “passion-sufferers” (*strastoterptsy*) who had—as Figes recounts—“willingly laid down their lives for the salvation of the Russian land” and whose sacrifice forced “a covenant between God and the newly baptized Rus, a new Terra Sancta, which was thus endowed with special grace.”⁸⁸ In the traditions of such thinking, Ivan Ilyin’s writings do not seem so outlandish.⁸⁹

And there would indeed seem to be something distinctly *Ilyinist*—if that is a word—about Vladimir Putin today. In the last several years, especially with the full-scale invasion of Ukraine that kicked off in early 2022, Putin has leaned into near-apocalyptic rhetoric about evil foreign threats and Russia’s holy mission to resist them. In a speech in which he also announced the annexation of portions of Ukraine, some of which Russian forces did not yet even control, for instance, Putin declared in September 2022 that Russia had been called by “fate and history” to a “battlefield”—“the battlefield for our people, for great historical Russia, for future generations, our children, grandchildren[,] and great-grandchildren.” It was Russia’s duty, he said, to fight the West’s “radical denial of moral norms, religion, and family”:

The dictatorship of the Western elites is directed against all societies, including the peoples of the Western countries themselves. This [Western conspiracy] is a challenge to all. This is a complete denial of humanity, the overthrow of faith and

⁸⁶ Figes, p. 75.

⁸⁷ “Putin attacks West as ‘satanic,’ hails Russian ‘traditional’ values,” *Reuters*, September 30, 2022, available at <https://www.reuters.com/article/world/us/putin-attacks-west-as-satanic-hails-russian-traditional-values-idUSS8N2Z80G1/>.

⁸⁸ Figes, *op. cit.*, p. 27.

⁸⁹ Ford, “Russia, China, and the Challenge of Asymmetry in Nuclear Ethics.”

traditional values. Indeed, the suppression of freedom itself has taken on the features of a religion: outright Satanism.⁹⁰

A month later, Putin said the West is “racist and neocolonial” and its objective is “to make Russia more vulnerable,” to “slander Russia, to humiliate it, or to ignore its interests.” (It had also, he claimed, subverted Russia by providing “hundreds of millions, if not billions, of dollars ... to support the opposition” to his government.) The West is nothing, he said, but “boundless despotism.”⁹¹

One would not expect a political culture tied to such narratives to demonstrate any particular sensitivity to the grave responsibilities and risks associated with nuclear weapons stewardship. It is no surprise, therefore, that modern Russia seems to approach nuclear weaponry with neither reservation nor qualm. If anything, in the age of Putin, nuclear weaponry appears to be regarded as an emblem of Russia’s continuing (and future) greatness, a tool with which to vindicate its dreams of restored glory, and perhaps even an Ilyanist “fiery sword” with which to achieve some kind of dark, retributive purification.

Senior Russian Orthodox Church officials—among them Patriarch Kirill of Moscow, the Primate of the entire ROC—use their pulpits and religious authority to endorse the Putin regime’s narrative about Russia being imperiled by evil outside threats, and about the insidious “spiritual pollution” of Western ideas of liberal democracy. With respect specifically to nuclear weapons issues, ROC leaders encourage military service in this struggle as “the most Christian of professions,” and have stressed what they describe as “the vitally important role of the nuclear weapons [sic] in preserving an independent and united Russia.”⁹²

In a phenomenon that Adamsky calls the “theocratization of the nuclear complex,”⁹³ the Russian Orthodox Church has become deeply entangled in the Kremlin’s nuclear weapons policy, uncritically supporting the government line (whatever it may be) and providing Russian nuclear forces with spiritual legitimacy and endorsement. ROC leaders have provided Russia’s nuclear weapons industry, its strategic missile forces, its long-range nuclear bombers, its ballistic missile submarine fleet, and its nuclear high command with official patron saints. Individual nuclear bombers are often consecrated with an ROC rite specially developed for this purpose, and an Orthodox monk is apparently even permanently assigned to the Russian nuclear weapons test site.⁹⁴

Even as early as 1996, in fact,—several years before Putin’s rise to power—ROC officials had begun to think about nuclear weapons serving as “an ‘obstacle to the [Western] forces of darkness’” that threatened Russia, and as being necessary to “deter the [Western] satanic

⁹⁰ “Excerpts from Putin’s speech at annexation ceremony,” *Reuters*, September 30, 2022, available at <https://www.reuters.com/world/extracts-putins-speech-annexation-ceremony-2022-09-30/>.

⁹¹ Vladimir Putin, remarks at the 19th Meeting of the Valdai Discussion Club, October 27, 2022, available at <http://en.kremlin.ru/events/president/news/69695>.

⁹² Dmitry Adamsky, *Russian Nuclear Orthodoxy* (Stanford University Press, 2019), pp. 53 & 153-54.

⁹³ Adamsky, *Russian Nuclear Orthodoxy*, p. 5.

⁹⁴ See *Ibid.*, pp. 29-31, 49, 51-52, 56, 58-59, 60, 63, 65, 68, 100-01, 109, 115, 123, 127, 130, 194, & 218-19.

effort to civilize Russia.” The Archbishop of Nizhni Novgorod has praised “the nuclear shield, which stopped the aggressive aspirations of the Fatherland’s adversaries” and which he said had enabled Russia to save the world from Western intimidation.⁹⁵ ROC officials laud the Russian “defender-bomb” that they compare to the American “killer-bomb,” arguing that the Russian nuclear arsenal thus serves the good of humanity. Kirill himself has declared that nuclear weapons are the key to Russia’s “preserv[ing] [its] great power status,” for the country “could not be a great power” without them.⁹⁶

These church positions have clearly been encouraged by the government of President Putin as a tool of his domestic power, especially as the regime—now in wartime, thanks to Putin’s invasion—has nursed notions of redemptive holy mission and ferocious self-sacrifice in a crusade against evil and spiritual corruption. But however cynical and opportunistic such narratives may be as foci for government propaganda, to the degree that they have currency in contemporary Russian political culture, they may indeed influence on Russian nuclear policy.

Conclusion

I do not pretend to offer a conclusive adjudication of the relative explanatory power of these various “framings” for helping to understand Russian nuclear weapons policy. I do, however, believe all three interpretations have at least some explanatory strength. In particular, both the game-theoretical framing of “hyperflexible coercion” and that of the “offensive nuclear umbrella” seem to me highly compelling, and both seem highly congruent both with the concrete circumstances of Russia’s nuclear posture and the complexities of its doctrinal approaches to nuclear coercion. Yet great power status-seeking also seems likely to be an important factor in the Kremlin’s approach to nuclear weaponry—as, alas, does the disturbing framing of modern Russia’s “nuclear cult.”

As U.S. leaders struggle with how to deal with Russia and its continuing nuclear bellicosity, it may be very helpful to remember the complicated valences suggested by this multiple-framing analysis. Russian nuclear weapons thinking is likely to be resistant to simple, monocausal explanation. As we work to deter the Kremlin from further aggression and eventually perhaps someday to entice it to return to the business of negotiated nuclear reductions, it will be important to understand this complexity.

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⁹⁵ Ibid., pp. 75 & 111-12.

⁹⁶ Ibid., pp. 76, 88, 93-97, 118, 132, & 147.

of Mass Destruction and Counterproliferation at the U.S. National Security Council. This paper is adapted from a lecture Dr. Ford delivered to a class at Missouri State University's Graduate School of Defense and Strategic Studies. The views Dr. Ford expresses herein are entirely his own, and do not necessarily represent those of anyone else.



ANALYSIS

RESTORING DETERRENCE AND FREEDOM OF NAVIGATION IN THE RED SEA: THE INTERACTION OF REGIONAL AND FOREIGN ACTORS

Stephen Blank

Introduction

On March 15, 2025, U.S. forces launched large-scale and “unrelenting” attacks against the Houthi terrorists in Yemen.¹ These attacks had as their stated aim not just punishment of the Houthis for their attacks on international and Israeli shipping in and around the Red Sea. Rather the Trump Administration made clear that these attacks also were a warning to Iran to cease providing the Houthis with weapons and to forego its ongoing efforts to acquire nuclear weapons lest it undergo similar punishment.² Specifically President Trump stated that, “Every shot fired by the Houthis will be looked upon ... as being a shot fired from the weapons and leadership of Iran.”³ Thus, these attacks represented a particularly noteworthy example of conventional deterrence by punishment with the express threat of further attacks if either of these conditions, Houthi attacks coupled with Iranian support and/or Iranian nuclearization took place.

Rhetorically the Administration has promised the threat of “unrelenting,” i.e. continuing large-scale aerial attacks on the Houthis. But while such attacks are taking place, the Houthis are now (March 18, 2025) launching regular attacks on U.S. ships, particularly the USS Harry S. Truman carrier.⁴ They also are promising more attacks on Israeli ships for allegedly breaking the truce with Hamas.⁵ It is unclear if both sides are still shooting at each other as of early April. So, this might be a protracted deterrence operation, a situation that raises the question of whether or not this continuing and possibly continuous attack is the optimal strategy for Washington in confronting the Houthi challenge.

This essay attempts to reach a conclusion to that question by examining the nature of the Houthi challenge given the fact that while they may be acting on their own, at the same time it is clear that the Houthis enjoy the patronage of Iran, China, and Russia, making this a proxy

¹ Eric Schmitt and Jonathan Swan, “Trump Orders Attacks on Militant Sites in Yemen and Issues a Warning to Iran,” *The New York Times*, March 15, 2025, available at <https://www.nytimes.com/2025/03/15/us/politics/us-attack-houthis.html>; Keith Johnson, “Trump Dramatically Escalates Military Strikes on Yemen’s Houthis,” *Foreign Policy*, March 18, 2025, available at <https://foreignpolicy.com/2025/03/18/trump-houthi-strikes-yemen-israel/>.

² Ibid.

³ Dennis Ross, “How to Match Ends and Means in the Middle East: America Must Rediscover the Practice of Statecraft,” *Foreign Affairs*, March 19, 2025, available at <https://www.foreignaffairs.com/middle-east/how-match-ends-and-means-middle-east>.

⁴ “Caitlyn Burchett, “US Strikes Houthis For Third Day, Pentagon Says Attacks Will Continue Until Targeting Of Red Sea Ships Stops,” *Stars and Stripes*, March 17, 2025, available at https://www.stripes.com/theaters/middle_east/2025-03-17/red-sea-attacks-houthis-yemen-17177178.html; “Houthis Claim Latest Attacks On US Warships and Promise Response To Israeli Massacre In Gaza,” *Tag 24*, March 18, 2025, available at <https://www.tag24.com/world/houthis-claim-latest-attacks-on-us-warships-and-promise-response-to-israeli-massacre-in-gaza-3369273>.

⁵ Ibid.



war. Furthermore, despite their claims of Arab solidarity with terrorist attacks on Israel, the evidence suggests that the Houthis' main motive is profit and terrorism that they then use to strengthen their position in Yemen.⁶ In other words, they are simultaneously pirates and terrorists as well as other parties' proxies. Thus, this operation also partakes of the war on terrorism and that aspect, too, must be taken into account. Therefore, any extended operation against the Houthis comprises aspects of conventional deterrence, proxy warfare as seen from Tehran, Beijing, and Moscow, and the war on terrorism. For these reasons it is necessary to begin with an exploration of the Houthis' strategy and the motives if not strategy of their patrons: Iran, China, Russia. Following this is a discussion of the U.S. operation and an assessment of its chances of success.

Despite the fall of the Assad regime, the defeats of both Hezbollah and Hamas, the ensuing collapse of Iran's axis of resistance strategy, and now American attacks, the Houthi rebels in Yemen remain undeterred. Until the truce between Hamas and Israel came into being the Houthis were still targeting and sinking ships in the Red Sea, the Arabian Sea, and the Indian Ocean.⁷ And now, as noted above, they have started firing at U.S. ships. Moreover, the Houthis have stepped up the pace of missile attacks against Israel—from October 7, 2023 to December 2024 they struck Israel with missiles 220 times.⁸ At the same time they are running guns to the Al-Shabaab pirates in the Indian Ocean and Horn of Africa.⁹ As *The Economist* points out, the Houthis are essentially running a protection racket, demanding fees from shippers to sail through the Red Sea or risk attack.¹⁰ Although they claim to be acting on behalf of Hamas and the Palestinians and have ceased attacks as long as a cease-fire between Israel and Hamas holds, their real motive appears to be making money with which to buy new weapons and cement their control over most of Yemen. Furthermore,

⁶ Jonah Carlson, "Houthi Motivations Driving the Red Sea Crisis: Understanding: How Ansar Allah's Strategic Culture Goes Beyond Gaza and Iran," *Journal of Advanced Military Studies*, Vol. 15 No. 2, 2024, pp. 94-114, available at <https://www.usmcu.edu/Outreach/Marine-Corps-University-Press/MCU-Journal/JAMS-vol-15-no-2/Houthi-Motivations-Driving-the-Red-Sea-Crisis/>; Fatima Abo Alasrar, "The United States' Houthi Terrorist Designation Unmasks Russia's Yemen Strategy," Atlantic Council, March 14, 2025, available at <https://www.atlanticcouncil.org/blogs/menasource/houthi-terrorist-designation-russias-yemen-strategy/>.

⁷ Adam Makary, Hatem Maher and Jaidaa Ahmad, "Houthis Target Three Ships in Red Sea and Arabian Sea," *Marine Link*, October 29, 2024, available at <https://www.marinelink.com/news/houthis-target-three-ships-red-sea-518574>; Mohammad Sameai, "Yemen's Houthis Claim Attacks On 2 Vessels In Red Sea, Indian Ocean," *AA*, October 10, 2024, available at <https://www.aa.com.tr/en/middle-east/yemen-s-houthis-claim-attacks-on-2-vessels-in-red-sea-indian-ocean/3358340>.

⁸ Philissa Cramer, "Tel Aviv Area School Hit By Houthi Missile Fired From Yemen," *Jewish Telegraph Agency*, December 19, 2024, available at <https://www.jta.org/2024/12/19/israel/tel-aviv-area-school-hit-by-houthi-missile-fired-from-yemen>; Lazar Berman, "Israel Shifts Focus To Houthis, But It Needs Partners To Defeat Distant Foe," *Times of Israel*, December 25, 2024, available at <https://www.timesofisrael.com/israel-shifts-focus-to-houthis-but-it-need-partners-to-defeat-distant-foe/>.

⁹ Rear Admiral Sudarshan Shrikande, Indian Navy Retired, "Red Sea Attacks Dominated The Indian Ocean Region in 2023," *Proceedings of the U.S. Naval Institute*, May 2024, p. 69.

¹⁰ "Houthi Inc: the pirates who weaponised globalisation," *The Economist*, January 16, 2025, available at <https://www.economist.com/leaders/2025/01/16/houthi-inc-the-pirates-who-weaponised-globalisation>; "Shipping Shakedown: Inside the Houthis' Moneymaking Machine," *The Economist*, January 16, 2025, available at <https://www.economist.com/interactive/international/2025/01/18/inside-the-houthis-moneymaking-machine>.

they and their Iranian allies have been attacking ships in the Red Sea since well before 2023.¹¹

Not surprisingly, they enjoy Iranian, Chinese, and Russian support. Those powers have transferred weapons, funding, and ship sighting technology to the Houthis. Certainly, the members of the so-called axis of upheaval have refused to support any diplomatic efforts against them. For example, China flatly rejected U.S. overtures to cooperate in defending freedom of navigation against the Houthi attacks.¹² Instead, despite early Houthi attacks on Chinese ships, Beijing rejected American overtures to make its own deal with the Houthis and probably remind Iran that they might shift suppliers of oil if attacks continued. Since Iran sells huge amounts of oil to China and depends on that revenue, this threat was serious.¹³ Likewise, the Houthis have stated that they will freely allow Russian and Chinese ships to traverse the Red Sea unmolested presumably in return for political if not military support.¹⁴ Thus, the Houthis are quite consciously acting not only on their own behalf but also as these states' proxies. As a result, they are threatening not only Israel and other Arab states who depend on the trade through this sea but also the foundational principle of freedom of the seas.¹⁵ By the end of 2024, "using various types of weapons, the Houthis have so far conducted over one hundred attacks against commercial ships and warships since November 2023, announcing new shipping restrictions at every stage of their campaign."¹⁶ More recently *The Economist* reported that for 2024 they attacked 200 ships damaging more than 40.¹⁷

For the moment the Houthis appear to have weathered the recent crises in the Middle East. Their opponents in Yemen continue to be unable to forge a united front against them

¹¹ Seth G. Jones, Jared Thompson, Danielle Ngo, Brian McSorley, and Joseph S. Bermudez Jr., "The Iranian and Houthi War against Saudi Arabia, *CSIS Briefs*, December 2021, pp. 6-7, available at https://csis-website-prod.s3.amazonaws.com/s3fs-public/publication/211221_Jones_IranianHouthi_SaudiArabia.pdf?VersionId=fn1d98tAhj7yOUr.IncppMueLOC4kv83.

¹² Richard Lloyd Parry, "China 'Rejected' US Pleas To Cooperate In Houthi Crisis In Yemen," *The Times*, October 3, 2024, available at https://www.thetimes.com/world/middle-east/israel-hamas-war/article/china-rejected-us-pleas-to-co-operate-in-houthi-crisis-in-yemen-3t6s69x8z?utm_medium=Social&utm_source=Facebook&fbclid=IwY2xjawHWLEpleHRuA2FlbQlXMQABHadTbGTMxP4I5GLYROyWUXhfAOkgjngNl_fyqeQWLJY7y9xtoN5VX2wFBQ_aem_b50061b1ihigq7HZ29IKaw®ion=global#Echobox=1727962657; "Shipping Shakedown," op. cit.

¹³ Ibid.; Bill Gertz, "China Sought Own Deal To Avoid Houthi Rebel Ship Attacks, Rejecting U.S. Coalition, Diplomat Says," *Washington Times*, October 9, 2024, available at <https://www.washingtontimes.com/news/2024/oct/8/china-sought-own-deal-to-avoid-houthi-rebel-ship-a/>.

¹⁴ James Farrell, "Houthis Reportedly Strike Deal With Russia, China For Safe Passage," *Forbes*, May 21, 2024, available at <https://www.forbes.com/sites/jamesfarrell/2024/03/21/houthis-reportedly-strike-deal-with-russia-china-for-safe-passage/>.

¹⁵ US Central Command, "CENTCOM Forces Defeat Houthi Attacks on U.S. Navy and U.S.-Flagged Ships in the Gulf of Aden," December 10, 2024, available at <https://www.centcom.mil/MEDIA/PRESS-RELEASES/Press-Release-View/Article/3994115/centcom-forces-defeat-houthi-attacks-on-us-navy-and-us-flagged-ships-in-the-gul/>; Robert Wright, "Houthis Extend Attacks On Shipping To Wider Indian Ocean," *Financial Times*, May 1, 2024, available at <https://www.ft.com/content/778a80a0-1f55-4ffc-ade0-857bd5bd9b92>.

¹⁶ Noam Raydan and Farzin Nadimi, "Houthi Shipping Attacks: Patterns and Expectation For 2025," The Washington Institute for Near East Policy, December 16, 2024, available at <https://www.washingtoninstitute.org/policy-analysis/houthi-shipping-attacks-patterns-and-expectations-2025>.

¹⁷ "Shipping Shakedown," op. cit.

and they are successfully recruiting new members.¹⁸ Furthermore, their arsenal appears to be growing. Recent reports indicate that,

The Houthis' military power has expanded with significant support from Iran, which has provided them with advanced missile and drone technology. Their arsenal now includes the Hastem-2-missile, the Asif anti-ship missile, and Iranian-made drones, enabling them to strike targets at long distances, including Israel, US and UK warships, and critical maritime trade routes in the Red Sea and Gulf of Aden. The group's military doctrine has evolved beyond traditional guerrilla tactics, adopting strategies similar to Iran's other regional proxies, such as Hezbollah and Hamas. This evolution includes the use of swarm drone warfare, precision-guided missile strikes, and a growing reliance on electronic warfare tactics to counter air and missile defense systems. The Houthis have also developed sophisticated deployment strategies, utilizing mobile launch platforms, coastal areas, and deeply buried underground storage facilities.¹⁹

The Houthis' rising strike capabilities confirm Australian expert, General Mick Ryan's (Ret.) observation that,

Implication 1: Strategic strike is no longer the preserve of major powers. During the Cold War, long-range strike capabilities were largely the preserve of major powers such as America, the Soviet Union and other nuclear powers such as Britain, France and China. However, the advent of cheaper long-range drones, wider availability of ballistic missiles, better access to commercial sensing systems and cyber operations means that long-range strike is now available to a much larger number of states, as well as non-state actors.²⁰

This factor plus the extent of foreign support for the Houthis necessitates a strategic approach to dealing with the problems they represent. The extent of foreign support for them highlights the entanglement of both regional and foreign actors in Red Sea and Middle Eastern security. These facts, plus the scope of these attacks, indicate that the Houthis are a multi-purpose terrorist organization serving objectives that transcend Yemen's tangled politics. This makes them an excellent proxy for Iran, China, and Russia. Meanwhile the pattern of their attacks reflected a steady escalation of strikes throughout 2024 on international trade and Israeli targets despite the defeats suffered by Hamas, Hezbollah and Iran.²¹ This fact, in turn, suggests that Iran, despite the breakdown of its strategies and defeats suffered in 2024, remains committed to its anti-Western strategy and the destruction of Israel. Therefore, the Houthis and the powers behind them—Iran, China, and Russia—

¹⁸ Paulo Aguilar, "Houthis Emerge From Red Sea Shipping Crisis Unscathed," *Geopolitical Monitor*, February 19, 2025, available at <https://www.geopoliticalmonitor.com/houthis-emerge-from-red-sea-shipping-crisis-unscathed/>.

¹⁹ Ibid.

²⁰ Mick Ryan, "Ukraine Strikes Back – Hard," *Futura Doctrina*, March 28, 2025, available at <https://mickryan.substack.com/p/ukraine-strikes-back-hard>.

²¹ Raydan and Nadimi, op. cit.

represent a serious threat to local, regional, and international security that must be deterred by a credible strategic operation lest they and their supporters believe that they once again have a green light for their attacks on the West.

The Need for Strategy

Accordingly, the necessity for a more effective strategy to deter the Houthis and their patrons is clear. The Houthis announced their support for Hamas early on after the latter's attack on Israel on October 7, 2023, with the open intention of reorienting and significantly enhancing maritime and naval operations against Israel.²² They also purportedly are attacking international shipping in the Red Sea to punish supporters of Israel like the United States and United Kingdom. Consequently, if they are allowed to flourish and keep getting advanced weapons and GPS or other ship sighting technology from their patrons, giving them an enhanced sea domain awareness, their targeting could become "progressively more dangerous" leading to escalation of their attacks and effective closure of the Red Sea mainly to Western traffic.²³

As of the end of 2024, and probably as of April 2025, despite the presence of the U.S., UK, and other navies who are responding to Houthi attacks on shipping and retaliatory Israeli strikes whenever they launch a missile, and more recent U.S. strikes, the Houthis have not been deterred. Thus, they have introduced a jarring note into the ever-troubled Middle East. As the Jordanian scholar, Hasan Jaber writes,

The geopolitical complexities of the Red Sea have intensified due to the Gaza conflict and the Houthis' strategic actions in Yemen. The Houthis' targeted attacks on Israeli-linked maritime routes have introduced a disruptive new dimension, linking Red Sea stability to broader Middle Eastern escalation. Their latest strategy of balancing threats (as a non-state actor) —leveraging asymmetrical tactics to create economic and security challenges—has exposed Israel's vulnerabilities and exerted indirect pressure on both Israel and its allies. This approach highlights the evolving nature of modern conflict, where non-state actors can significantly impact regional stability.²⁴

Even when individual strikes appear to increase in frequency and magnitude this has not stopped Houthi attacks.²⁵ Thus Jaber and Ryan's observations must be factored into any operational planning against them to terminate their attacks on international shipping. The U.S.-led multi-national Operation Prosperity Guardian has also hitherto failed to uproot the

²² Shrikande, op. cit., p. 69.

²³ Ibid., p. 68.

²⁴ Hasan Jaber, "Strategic Shifts in the Red Sea: Houthis' Strategies, Gaza War, and Prosperity Guardian Operation," *Jordanian Politics & Society Magazine*, Vol. 1, No. 1, June 2024, p. 137.

²⁵ U.S. Central Command, "CENTCOM Forces Strike Houthi Advanced Conventional Weapon Storage Facilities in Yemen," January 8, 2025, available at <https://www.centcom.mil/MEDIA/PRESS-RELEASES/Press-Release-View/Article/4023812/centcom-forces-strike-houthi-advanced-conventional-weapon-storage-facilities-in/>.

Houthis. As Rear Admiral Sudarshan Shrikande (Ret.) of the Indian Navy points out, presence does not equate to deterrence.²⁶ Still worse, “At the same time, among nations that have developed navies and other instruments of power, it has been difficult to find strategic coherence and common policy outcomes aided by well-coordinated operations.”²⁷ Likewise, Jaber reports that,

The U.S.-led Operation Prosperity Guardian underscores the challenges and limitations of international military coalitions in addressing such multifaceted threats. The absence of crucial regional powers like Saudi Arabia and Egypt from the coalition reflects their strategic priorities and questions the operation’s effectiveness. These dynamics illustrate a broader trend of regional powers focusing inward and avoiding entanglement in additional conflicts.²⁸

Clearly the United States has struggled to forge effective partnerships and partners are concerned by the potential loss of high-tech platforms and weapons to the Houthi attacks.²⁹ The recent unilateral attacks and the unwarranted and uninformed scoffing at European participation displayed in the Signalgate scandal continues this trend of failing to build effective partnerships.³⁰ A conference of experts on the Red Sea similarly concluded that,

Adversarial forces have near parity in capability in the Red Sea, a unique feature of the area. Relations between the United States and Iran offer one example. The US is stretched very thinly in the Red Sea, without enough vessels to control the area alone, making it in need of regional assets and partners. Iran, meanwhile, has essentially a ‘floating armory’ patrolling the Red Sea, at the disposal of a regime that knows how to leverage harm to the international system and its Western backers.³¹

Therefore, it is increasingly clear that the United States and its allies, including Israel, Egypt, and Saudi Arabia, must develop an effective campaign plan to forestall the Houthis and their patrons’ future attacks and negate their strategies connected to those attacks.³² Moreover, this campaign must include pressure upon if not targeting of Iran, an idea that is

²⁶ Shrikande, op. cit., p. 68.

²⁷ Ibid.

²⁸ Jaber, op. cit., p. 137.

²⁹ Shrikande, op. cit., p. 68.

³⁰ Jeffrey Goldberg and Shane Harris, “Here Are the Attack Plans That Trump’s Advisers Shared On Signal,” *The Atlantic*, March 26, 2025, available at <https://www.theatlantic.com/politics/archive/2025/03/signal-group-chat-attack-plans-hegseth-goldberg/682176/>.

³¹ Simon Rynn and Benjamin P. Nickels, “Enhancing Security In the Red Sea Arena,” The Clock Tower Series, George C. Marshall European Center For Security Studies, 2024, p. 2, available at <https://www.marshallcenter.org/en/publications/clock-tower-security-series/enhancing-security-red-sea-arena/enhancing-security-red-sea-arena>.

³² Tamir Hayman, “The Strike In Yemen: A Justified Response-But Insufficient For Changing the Reality,” The Institute for National Security Studies, December 19, 2024, available at https://www.inss.org.il/social_media/the-strike-in-yemen-a-justified-response-but-insufficient-for-changing-the-reality/.

gaining currency in Israel and possibly in the United States.³³ This is because a direct bombing campaign will not suffice to deter or stop the Houthis unless the flow of weapons and technology from their patrons is stopped.³⁴ Since a land operation against them in Yemen is quite unlikely, any successful campaign must leverage allied air, sea, and diplomatic capabilities to strategic effect. The new U.S. strikes on the Houthis thus represent the Trump Administration's unilateral effort to cut the Gordian Knot and solve the problem by airpower and the threat of holding Iran hostage to the Houthis' behavior as a form of deterrence. Therefore, they are likely to fail to achieve a strategic resolution of this threat whatever the short-term results might be.

The danger of the Houthis and their patrons' returning to escalatory attacks if they are not deterred is a real one. Despite strong U.S. and allied counterstrikes on Houthi targets, they refuse to desist from attacking ships in these locales though they claim a willingness to sign a roadmap agreement for peace with Yemen.³⁵ In other words, they want full freedom to continue fighting and thus to obtain foreign support. It should also be remembered that they have fought an on-again off-again war with Saudi Arabia for years.³⁶ And their attacks on Israel reflect not just an abiding anti-Semitism but clear support for Iran's strategy while Sino-Russian support for the Houthis displays these powers' support for Iran, for advancing their regional agenda, and their commitment to promoting regional destabilization wherever possible. Furthermore, as many observers understand, attacking the Houthis with expensive missiles while they can use drones and cheaper weapons means they are fighting a cost-imposing strategy against the United States and its allies and that they are at least holding their own.³⁷

From the Israeli point of view the justification for a campaign against the Houthis, as Prime Minister Netanyahu is now threatening, is quite strong apart from the terror attacks by missiles upon civilians.³⁸ As Tamir Hayman of Israel's Institute for National Security Studies (INSS) writes,

³³ Ibid.; James Dorsey, "Israel's Middle East War: Yemen Is Definitely Next, Maybe Iran Too," December 26, 2024, available at <https://jamesmdorsey.substack.com/p/israels-middle-east-war-yemen-is>; Alexander Ward and Laurence Norman, "Trump Team Weighs Options, Including Airstrikes, to Stop Iran's Nuclear Program," *The Wall Street Journal*, December 13, 2024, available at <https://www.wsj.com/world/middle-east/trump-iran-plan-nuclear-weapons-def26f1d>.

³⁴ John Grady, "Stopping Flow Of Weapons To Houthis Key To Halting Merchant Attacks Says Fleet Forces Commander," *USNI News*, December 16, 2024, available at <https://news.usni.org/2024/12/16/stopping-flow-of-weapons-to-houthis-key-to-halting-merchant-attacks-says-fleet-forces-commander#:~:text=Daryl%20Caudle,Fleet%20Forces%20commander%20said%20Thursday>.

³⁵ Mohammad Sameai, "Houthis Express Readiness To Sign Yemen Peace Roadmap But Rejects Ceasing Red Sea Attacks," *AA*, December 17, 2024, available at <https://www.aa.com.tr/en/middle-east/houthis-express-readiness-to-sign-yemen-peace-roadmap-but-rejects-ceasing-red-sea-attacks/3427187>.

³⁶ Michael Knights, "The Houthi War Machine: From Guerrilla War to State Capture," *CTC Sentinel*, Vol. XI, No. 1, 2018, available at <https://ctc.westpoint.edu/houthi-war-machine-guerrilla-war-state-capture/>.

³⁷ Geoff Ziezulewicz, "What Red Sea Battles Have Taught the Navy About a Future China Fight," *The War Zone*, January 28, 2025, available at <https://www.twz.com/news-features/what-red-sea-battles-have-taught-the-navy-about-a-future-china-fight>.

³⁸ Dorsey, op. cit.

The reality is that from the moment the Houthis imposed a maritime blockade upon Israel, they effectively declared war. The blockade should have been lifted as quickly as possible using the IDF's capabilities, particularly the Navy. Due to the heavy burden on Israel's defense establishment and the desire to give the international coalition a chance to act against the Houthis, Israel refrained from responding for many months. Only after the murder of an Israeli citizen did the first response occur. Since then, Israel has attacked twice more, each time destroying critical infrastructure relating to energy and commerce. In contrast, the international coalition has limited itself to addressing Houthi military capabilities and, until recently, has primarily focused on removing threats and protecting shipping routes. Two critical elements have been entirely absent in the campaign against the Houthis. One is striking the sender, Iran, which funds and orchestrates the missiles from Yemen. Both the international coalition and Israel have responded directly to the proxy rather than to the hand rocking the cradle. Second, there has been no effort to destroy the Houthis command and control or significantly degrade their military power. In other words, there is no extensive or sustained campaign to weaken the Houthis in a way that intensifies the pressure, as has been done with other adversaries in the current war.³⁹

The Strategic Agenda

Clearly the Red Sea region has thus become, "a showcase of shortcomings for the regional and international security order."⁴⁰ Equally obviously, there are strategic lessons here to ponder and learn from as a guide to defeating the Houthis, their patrons, and the strategies behind them. These lessons pertain to both the challenges of proxy war and to the question of preserving and/or restoring conventional deterrence and escalation control.

Obviously, the Houthis are an organization that combines terrorism with piracy and blackmail and does so on behalf of Tehran, Beijing, and Moscow as well as for its own interests. So, whatever the degree of alleged disunity in the Houthis' ranks may be, their criminal behavior now aligns with that of the so-called axis of upheaval.⁴¹ There are also still more aggravating factors from these attacks. For example, "The Houthis could launch more frequent and sophisticated missile and drone attacks on Israeli territory, ports, or infrastructure, demonstrating their capabilities and commitment to the 'Axis of Resistance.'"⁴² Worse yet, the Houthis are extending their support network to other regional non-state armed groups, including terrorists. Therefore, their attacks could, unless checked,

³⁹ Hayman, op. cit.

⁴⁰ Rynn and Nickels, op. cit., p. 5.

⁴¹ Robert Lansing Institute, "Scenarios and Implications of Escalating Conflict Between Israel and the Houthis," January 10, 2025, available at <https://lansinginstitute.org/2025/01/10/scenarios-and-implications-of-escalating-conflict-between-israel-and-the-houthis/>.

⁴² Ibid.

extend further out into the Indian Ocean, Arabian Sea, or Persian Gulf.⁴³ In that case this network would become far more difficult to confront.

At the same time, Houthi attacks clearly are part of the strategy of members of the anti-Western axis comprising Russia, China, Iran, and North Korea. Thus, the Houthis agreed to allow Chinese and Russian ships through the Red Sea, clearly signifying support for those powers.⁴⁴ Similarly they have received a wide range of Iranian military support for years.⁴⁵ Iran and its partners like Russia provided them with weapons and logistical support, much of it running through Syria. Russia has apparently also given the Houthis the technology necessary for them to target foreign ships in the Red Sea and Gulf of Aden.⁴⁶

However, the fall of the Assad regime in Syria may undermine them as it has certainly wrecked Iran and Russia's strategy of support for Hamas and Hezbollah because Syria was the logistical lynchpin of Iran's regional strategy. As Hassan Shemshadi, an expert on Iran's proxy militant groups, has observed, "Everything that Iran sent to the region went through Syria. It is now extremely difficult to keep these channels open."⁴⁷ Therefore the signs that Russia may succeed in retaining those bases has serious negative implications for the entire Middle East.⁴⁸

Yet there is still no sign that Iran is reconsidering its position on the Houthis or in support of its other proxies despite its and their many recent defeats.⁴⁹ In fact there is evidence that Iran is seeking, if it has not already acquired, new proxies in the Horn of Africa adjacent to the Red Sea, namely Eritrea, which has attacked Azerbaijani ships in the Horn of Africa. Since Azerbaijan is closely aligned to Israel and deeply antagonistic to Iran (and vice versa), this attack may well bear Iranian fingerprints.⁵⁰ Thus, given the defeat of Iran's other proxies,

⁴³ Eleonora Ardemagni, "Beyond the Axis: Yemen's Houthis are Building their 'Network of Resistance'," *RUSI*, November 18, 2024, available at <https://rusi.org/explore-our-research/publications/commentary/beyond-axis-yemens-houthis-are-building-their-network-resistance>.

⁴⁴ "Houthis Agree to Give China and Russia Ships a Pass in Red Sea," *Bloomberg*, March 21, 2024, available at <https://gcaptain.com/houthis-give-china-and-russia-a-pass-on-red-sea-shipping/>.

⁴⁵ Defense Intelligence Agency, "Iran Enabling Houthi Attacks Across the Middle East," February 28, 2024, available at https://www.dia.mil/Portals/110/Documents/News/Military_Power_Publications/Iran_Houthi_Final2.pdf.

⁴⁶ Matthew Loh, "Russia Gave Yemen's Houthi Rebels Satellite Data So They Could Attack Red Sea Shipping Lanes: Report," *Business Insider*, October 25, 2024, <https://www.businessinsider.com/russia-gave-houthis-satellite-data-hit-red-sea-shipping-report-2024-10>.

⁴⁷ Farnaz Fassihidi, "In the Syrian Regime's Hour of Need, Its Patron Iran Makes an Exit," *The New York Times*, December 8, 2024, available at <https://www.nytimes.com/2024/12/07/world/middleeast/iran-syria-rebels.html?searchResultPosition=1>.

⁴⁸ Loveday Morris and Zakaria Zakaria, "Syria Could Allow Russia To Keep Its Bases, New Defense Minister Says," *The Washington Post*, February 6, 2025, available at <https://www.washingtonpost.com/world/2025/02/06/syria-defense-minister-russia-bases/>.

⁴⁹ Paul Iddon, "Iran Refuses To Back Down As Its Proxies Endure Unprecedented Attacks," *Forbes*, October 4, 2024, available at <https://www.forbes.com/sites/pauliddon/2024/10/04/iran-refuses-to-back-down-as-its-proxies-endure-unprecedented-attacks/>.

⁵⁰ Habtom Gherebezghiabher, "Eritrea Has Become Iran's Proxy-and a Strategic Threat To Israel and the U.S.," *Haaretz*, January 16, 2025, available at <https://www.haaretz.com/world-news/2025-01-16/ty-article/.premium/eritrea-has-become-irans-proxy-and-a-strategic-threat-to-israel-and-the-u-s/00000194-6bae-ddc5-abd7-fbfb30e60000>.

the Houthis may now function as the key linchpin of this Iranian strategy.⁵¹ Meanwhile, as noted above, the Houthis show no sign of being deterred.

Consequently, the local crisis initially triggered by the Houthis' struggle for power in Yemen has visibly escalated to the regional and even great power level, demonstrating how easily the failure of conventional deterrence until now has made future deterrence more difficult, costly, and risky because sensitive if not vital regional and great power interests are now on the table. The Houthis' involvement and participation in Iran's strategy exemplify these processes for many reasons, not least due to Iranian and Russian backing for their raids on international commerce.

Worse yet, Western deterrence against both Tehran and the Houthis, including Israeli strategy, has failed. That failure, in turn, highlights the Houthis' successful strategy. They are conducting a cost-imposing strike upon the United States and its allies by using cheap drones to target vessels traversing the Red Sea while the United States and Israel, if not other allies participating in defense of freedom of navigation, have had to rely upon very expensive missiles and incur the cost of stationing navies in a war zone for extended durations. Therefore, it is necessary to find both an efficient and effective means of deterring them into the future. In other words, the operational, if not strategic challenge confronting the West is the restoration of conventional deterrence, the cessation of Iranian support, and the ensuing suppression or cessation of the Houthis' attacks on international trade and U.S. allies like Israel and Saudi Arabia.

Houthi Attacks

The Houthis' attacks on shipping, Saudi Arabia, and Israel represent critical elements of Iran's strategy involving its own forces and these three terrorist militaries, Hamas, Hezbollah, and the Houthis. These attacks have served a three-fold purpose while constituting Tehran's "axis of resistance." They were to confront Israel and exercise constant pressure upon it from multiple axes: Gaza, Syria, Lebanon, Palestine, if possible, and the Red Sea. As one recent account observes, "The more the Houthis' regional influence and ambitions rise, the more difficult it will be for regional and international stakeholders to disentangle the war in Yemen from the broader Middle East crisis."⁵² Their presence in these contested areas also serves to intimidate and thus deter Arab states from either forging new ties with Israel or threatening (particularly with U.S. backing or presence) Iran.

For example, as late as October 2024, after Iran attacked Israel for the second time with missiles and was awaiting Israel's reprisal (which came on October 26), Iran covertly but clearly warned the Gulf states and other regional U.S. allies in the Middle East that if they permitted their territories or airspace to be used for that reprisal or another attack on Iran,

⁵¹ Ardemagni, op. cit.

⁵² Ibid.

Iran would retaliate against them.⁵³ The scope and extent of Iran's threats reflects as well the full range of its ambitions as expressed in its strategy combining terrorism with threats of missile attacks. As one report noted,

The Arab officials said the countries that Iran has threatened include Jordan, the United Arab Emirates, Saudi Arabia and Qatar, all of which host U.S. troops. These states have told the Biden administration that they don't want their military infrastructure or airspace to be used by the U.S. or Israel for any offensive operations against Iran, the officials said. While the Iranian threats are vague, they have raised concerns in energy-rich Persian Gulf states that their oil facilities—long viewed as protected by an American security umbrella—could be hit, the Arab officials said. U.S. military installations and forces in the region could also be at risk in a region with one of the highest concentrations of American troops in the world, they added.⁵⁴

These threats clearly also foreshadow Iran's potential use of its nuclear weapons as a shield behind which terrorists could strike at these Arab countries or Israel or in other words an Iranian nuclear weapon or weapons would function as an extended deterrent against any retaliatory moves by anyone, including the United States. This point underscores the necessity of holding Iran to account for Houthi behavior before Tehran gets usable nuclear weapons.

At the same time, the losses to global trade and the global economy due to Houthi attacks are equally discernible. The Defense Intelligence Agency reported in mid-2024 the following damages to international trade from these attacks:

- As of mid-February 2024, container shipping through Red Sea had declined by approximately 90% since December 2023; shipping via the Red Sea typically accounts for approximately 10-15% of international maritime trade. Effects have been less severe in other shipping sectors carrying commodities on bulkers and tankers.
- Alternate shipping routes around Africa add about 11,000 nautical miles, 1-2 weeks of transit time, and approximately \$1 million in fuel costs for each voyage.
- For many shipping companies, the combined costs of crew bonuses, war risk insurance (roughly 1000% more than pre-war costs), and Suez transit fees make the additional time and financial costs traveling around Africa less expensive by comparison.
- Threats to Red Sea transits are compounding ongoing stress to global maritime shipping caused by interruptions at the Panama Canal due to drought. As of mid-

⁵³ Summer Said, Nancy A. Youssef, Omar-Abdel Baqui, "Iran's Secret Warning To U.S. Allies: Don't Help Israel Or You're Next," *The Wall Street Journal*, October 10, 2024, available at <https://www.wsj.com/world/middle-east/irans-secret-warning-to-u-s-allies-dont-help-israel-or-youre-next-ccfa5fa0>.

⁵⁴ Ibid.

February, insurance premiums for Red Sea transits have risen to 0.7-1.0% of a ship's total value, compared to less than 0.1% before December 2023.

- As of February 2024, humanitarian relief for Sudan and Yemen was also being delayed by weeks and costing aid organizations more because of longer routes around Africa.⁵⁵

Although some shippers have benefitted from the high costs imposed due to these attacks, by October 2024, transit in the Bab al-Mandab Strait is still down by over 50 percent year-over-year. The Red Sea crisis has created challenges for regional ports and key navigational routes like the Suez Canal, where the number of transits plummeted from around 2,068 in November 2023 to about 877 in October 2024, according to data from Lloyd's List Intelligence.⁵⁶

These costs apply as well to individual Middle Eastern states. For example, Egypt is incurring serious losses due to the Houthis. After record levels and a strong outlook for canal operations, reports indicate that overall traffic is down between 60 and 70 percent in the Suez Canal. The vast majority of container ships and all cruise ships have been diverted while an increasing number of bulkers, tankers, and car carriers have also rerouted. This comes despite U.S. and EU efforts to maintain navigation and suppress attacks by the Houthis. The past few months have shown a significant decline in the number of missile and drone attacks and long gaps between staging attacks. Egyptian Foreign Minister Badr Abdel Aati, however, reported that the loss of traffic has cost the Egyptian economy around \$6 billion in the past year. He emphasized to the International Maritime Organization (IMO) the critical role the canal income plays to the country.⁵⁷

Since then, the cost has gone up to \$7 billion equal to one third of Egypt's current account deficit.⁵⁸ Likewise, Israel has incurred costs of \$3 billion to its Red Sea Port of Eilat (excluding the damage done by Houthi missiles to the country's interior). Eilat has also suffered an 85% drop in activity.⁵⁹ These attacks also threaten Israel's other ports, Ashdod and Haifa, as at least 30% of the cargoes imported to Israel at these ports also must travel through the Red Sea.⁶⁰ These large-scale losses and costs to both allies and international trade oblige Washington and its allies to deter the Houthis and their Iranian patron sooner

⁵⁵ U.S. Naval Institute Staff, "DIA Report on Houthi Attacks and Pressure on International Trade," *USNI News*, June 13, 2024, available at <https://news.usni.org/2024/06/13/dia-report-on-houthi-attacks-and-pressure-on-international-trade#:~:text=Economic%20Implications%20of%20Houthi%20Attacks,15%25%20of%20international%20maritime%20trade>.

⁵⁶ Raydan and Nazimi, op. cit.

⁵⁷ "Egyptian Officials Cite 'Severe Loss' at One Year Mark for Houthi Attacks," November 4, 2024, available at <https://maritime-executive.com/article/egyptian-officials-cite-severe-loss-at-one-year-mark-for-houthi-attacks>.

⁵⁸ "Shipping Shakedown," op. cit.

⁵⁹ "Israeli Ports Impacted By Houthi Strikes," *Africa News*, August 13, 2024, available at <https://www.africanews.com/2024/01/24/israeli-ports-impacted-by-houthi-strikes//>; Ari Rabinovich, "Israel's Eilat Port Sees 85% Drop In Activity Amid Red Sea Houthi Attacks," *Reuters*, December 21, 2023, available at <https://www.reuters.com/world/middle-east/israels-eilat-port-sees-85-drop-activity-amid-red-sea-houthi-attacks-2023-12-21/>.

⁶⁰ "Israeli Ports Impacted By Houthi Strikes," Ibid.

rather than later to restore both allied security in the Red Sea and international trade. Moreover, the Houthis' patrons, China and Russia, are benefitting from this situation even though overall traffic in the Red Sea has declined by 50%. Despite this decline, Chinese shipping has increased and now represents about 20% of total shipping through the Red Sea while most of the crude oil traversing the Red Sea is Russian.⁶¹

Thus, the Houthis must be deterred because their activities not only imperil Red Sea shipping that accounts for about 12% of global shipping trade, but also because the longer they can act with impunity the more likely it is that other predatory actors will learn from and emulate their example with cascading effects for global trade and security.⁶² Furthermore, to the degree that they can continue to act with impunity, the danger of their becoming an autonomous force or one benefitting from Iran's extended deterrence grows by an order of magnitude. This deterrence strategy also entails countering if not also deterring Iran, China, and Russia's power projection strategy as they all have a demonstrated interest in having the Houthis continue their campaign despite the defeats of their "entente" or alignment in Gaza, Syria, and Lebanon. At the same time Jerusalem, U.S. allies, and Washington clearly have coinciding interests regarding security in the Red Sea and reopening it to free international navigation. Neither are they alone. Saudi Arabia has a long-running conflict with the Houthis and virtually every other regional government in the Middle East is at explicit risk from Iran.

Meanwhile, the Houthis' ongoing attacks not only call deterrence into question, their attacks on foreign navigation and Israel also epitomize the process by which regional conflicts become arenas for international and great power competition or possibly confrontation. Still another reason for the necessity of a more robust deterrence strategy is the failure of all previous attempts to deter the Houthis. The EU's Operation Aspides to protect Red Sea shipping has proven to be a resounding failure. It "lacks muscle" and it has escorted less than half the ships who need protection while NATO's ships take the long way home around Asia and Africa.⁶³ Other such efforts are also of limited utility.⁶⁴

Iranian Strategy

Given the Houthis' continuing attacks on both Israel and international shipping and their growing links to other non-state actors in the Horn of Africa, combined with Iran's nuclear, anti-Western, and anti-Israel strategy, the danger of not eliminating this threat is clear. Even if Hamas and Hezbollah are destroyed, Iran could reconstitute its "axis of resistance" around the Houthis and their connections in the Horn of Africa, and the Gulf, while still threatening Western, Saudi, and Israeli interests with support from Russia and China. That would

⁶¹ Shipping Shakedown," op. cit.

⁶² "Houthi Inc.," op. cit.

⁶³ "Shipping Shakedown," op. cit.

⁶⁴ Shirkande, op. cit.; Jaber, op. cit.

represent a continuation of Iran's previous asymmetric strategy.⁶⁵ Ideally, from Iran's standpoint, that could give Iran and its proxies local naval supremacy in and around the Red Sea and align it further with piracy in the Horn of Africa.⁶⁶ This is not an imaginary threat. Iran's Revolutionary Guards have just unveiled a hitherto secret underwater naval base at an undisclosed location:

Iran's unveiling of a new naval base is significant as it indicates that they are preparing for direct conflict with regional enemies, and possibly ones abroad. Moreover, the fact that the naval base is meant to house vessels capable of launching long-range missiles signifies that Tehran is planning to conduct more long-distance strikes.⁶⁷

Thus, the naval threat, whether in the Straits of Hormuz, the Persian Gulf, the Horn of Africa, or the Red Sea is now quite palpable.

At the same time, Iran has also used its terrorist proxies, along with the rising threat of nuclear capability, to enhance its own power projection capabilities in the Red Sea to the mounting concern of Israel and Egypt among others. As noted by several analysts,

In the background, Israel is concerned about Iran's attempts to establish a presence in the Red Sea region, evident in the deployment of an Iranian intelligence ship in the area, the continuous operation of Iranian warships in the Red Sea waters, and the activities of Iran's proxy in the region, the Houthi terrorist militia. Recently, Iran has renewed its interest in Sudanese ports, posing a threat to Israel and other countries in the region and further destabilizing the Red Sea area. Egypt also views the Houthi attacks as a direct and serious threat to its national security, but it seeks to end the attacks through a ceasefire in Gaza, which it claims is the root of the crisis.⁶⁸

Iran could then also function as a broker or middleman between Russia and the Houthis or these groups aligned with it since it has reportedly participated in talks to broker the shipment of Russian Yakhont (p-800 Oniks) anti-ship missiles to the Houthis.⁶⁹ And Iran's own capability to produce missiles and drones obviously plays a role here, especially in view of the new underwater base. Indeed, "Iran has also recently received a delivery of 1,000 domestically produced drones with a range of more than 1,200 miles, which are known for their 'advanced anti-

⁶⁵ Michael Eisenstadt, "Iran's Gray Zone Strategy: Cornerstone Of Its Asymmetric Way Of War," *Prism*, Vol. 9, No. 2, pp. 77-97, 2021, available at <https://ndupress.ndu.edu/Media/News/News-Article-View/Article/2541911/irans-gray-zone-strategy-cornerstone-of-its-asymmetric-way-of-war/>.

⁶⁶ Seth Frantzman, "Shadow War: Houthi Attacks Paved the Way For Iran's Naval Supremacy-Analysis," *The Jerusalem Post*, September 7, 2024, available at <https://www.jpost.com/middle-east/iran-news/article-819075>.

⁶⁷ Maya Mehrara, "Iran Unveils New Underground Naval Base," *Newsweek*, January, 20, 2025, available at <https://www.newsweek.com/iran-unveils-new-underground-naval-base-2017582>.

⁶⁸ Yoel Guznansky, Yuval Eylon, Ofir Winter, "Israel In The Red Sea: From Threats To Cooperation," The Institute for National Security Studies, October 9, 2024, available at <https://www.inss.org.il/publication/israel-in-the-red-sea/>.

⁶⁹ John Irish Pariza Hafezi, and Jonathan Landay, "Exclusive: Iran Brokering Talks To Send Advanced Russian Missiles To Yemen's Houthi," *Reuters*, September 24, 2024, available at <https://www.reuters.com/world/middle-east/iran-brokering-talks-send-advanced-russian-missiles-yemens-houthis-sources-say-2024-09-24/>.

fortification and stealth capabilities.”⁷⁰ Furthermore, Iran’s overall strategy of arming and then deploying Hamas, Hezbollah, and the Houthis to deter Arab, Israeli, and Western pressure on Iran apparently remains intact.⁷¹ Iran believes that its proxies’ constant pressure was weakening Israel in preparation for what Iranian strategists believed and hoped would be a final struggle with it.⁷² Iran has also used these assets, along with the rising threat of nuclear capability, to enhance its own power projection capabilities in the Red Sea to the mounting concern of Israel, Egypt, and others.⁷³

This move appears to be part of a broader Iranian ambition to acquire bases and permanent influence in Africa. For example, Iran is supporting the Sudanese Armed Forces (SAF) of General Abd Al-Fatah al-Burhan with weapons against the rebel forces led by General Handan Daglo Hemedti. This support has triggered reports that Iran might be eyeing a naval base in Sudan. Iran may even have asked for such a base in exchange for advanced weapons, drones and a seagoing helicopter. While such reports remain unconfirmed and trigger strong denials, it makes sense for Iran to have sought such a base as it already operates naval vessels in the Red Sea. Therefore, this base would give it more ability to help the Houthis and to threaten international shipping in the Red Sea.⁷⁴ Since it appears that the Russo-Sudanese agreement on a naval base for Russia in Sudan is once again on, though some think an Iranian base would rival that of Russia, the most recent trends in Russo-Iranian relations suggests otherwise.⁷⁵ This is especially true in regard to the recent Russo-Iranian treaty.

Iran has already created its own naval forces capable of blocking the Straits of Hormuz using mines, drones, missiles, small boat swarms, and submarines to deploy anti-access weapons that can target U.S. commercial vessels and capital ships. It aims to deter U.S. presence there and in the Gulf more generally. Having a base in the Horn of Africa and combining its Persian Gulf assets with that base, the Houthis could create a very formidable naval threat in those waters for the United States, Israel, and commercial shipping.⁷⁶

At the same time, however, the most disturbing recent action in this region is the recent Russo-Iranian treaty of January 2025.⁷⁷ This treaty proclaims the parties’ mutual desire to strengthen regional security in the former Soviet space and Middle East. It proclaims enhanced defense cooperation that suggests more mutual arms and technology transfers. Thus military-technical cooperation is expressly included here as a mutual commitment.

⁷⁰ Mehrara, op. cit.

⁷¹ Arash Reisinezhad, “Iran’s Israel Strategy Has Already Changed,” *Foreign Policy*, October 11, 2024, available at <https://foreignpolicy.com/2024/10/11/irans-israel-strategy-has-already-changed/>.

⁷² Ibid.

⁷³ Guznansky, Eylon, and Winter, op. cit.

⁷⁴ Andrew McGregor, “Iran’s Red Sea Strategy Amid the RSF-SAF Fratricidal War In Sudan,” The Jamestown Foundation, December 11, 2024, available at <https://jamestown.org/program/irans-red-sea-strategy-amid-the-rsf-saf-fratricidal-war-in-sudan/>.

⁷⁵ Ibid.

⁷⁶ Eisenstadt, op. cit., p. 79.

⁷⁷ Government Of the Islamic Republic Of Iran, “Full Text Of Iran-Russia Comprehensive Strategic Partnership Agreement,” January 17, 2025, available at <https://irangov.ir/detail/456479>.

Given Iran's missile and drone transfers to Russia and oft-expressed interest in advanced fighters like the Su-35 and air defenses, this could also include support for exchanges of nuclear, missile, and space technology. Indeed, there already are Iranian reports that claim Iran has received the Su-35.⁷⁸ The treaty further states that both sides will expand intelligence cooperation and anti-terrorist cooperation, suggesting cooperation with Iranian efforts to subvert Azerbaijan on the alleged grounds of terrorism there as well as support for Iranian proxies in the Middle East. The treaty also openly advocates excluding American and European influence in the Middle East and the Caspian basin i.e., it proposes a Russian hegemony over Central Asia and the Caucasus. In economics, it emphasizes creating a North-South transport corridor from Iran and presumably beyond to Russia that would block independent Central Asian trade and transport routes while tying Azerbaijan to a Russian dominated economic scheme. Thus, this accord, though not a formal defense alliance, nonetheless represents a treaty for increased subversion, terrorism against both Israel and Arab governments, war in Ukraine, weapons, and possibly nuclear technology trade between the parties.⁷⁹

Beyond all the preceding examples of Iran's aggressive policies, Iran's reported closeness to acquiring a functioning nuclear weapon shows that its nuclear program is closer to fruition than ever before. Iran has already exceeded the level of 60% enriched uranium that has served as a benchmark for proliferators with every other state that has enriched uranium to that level acquiring nuclear weapons.⁸⁰ It also is true that Iran's extensive suite of drones and missiles, plus help from China and Russia, ensure that Iran's overall arsenal and its policies remain profoundly destabilizing factors across the entire Middle East. Should Iran successfully create its own nuclear weapons, a goal to which Iran has now come very close, that would allow it to extend nuclear and conventional deterrence to its proxies and other members of this "axis of resistance" in order to move forward with its goal of destroying Israel and establishing an Iranian-sponsored Shiite hegemony in the Middle East.⁸¹ At the same time, these proxies, backed up by Iran's increasing missile and drone arsenal and ultimately its nuclear potential, constitute an equally wide range of threats to every other Middle Eastern state. Indeed, Iran or these proxies have frequently threatened or struck at those states.

This strategy lies in ruins for the moment. Nevertheless, that does not mean Iran will renounce its nuclear strategy. Indeed, defeat may lead Iran to accelerate its nuclear program,

⁷⁸ "Iran's Revolutionary Guards Commander Says Iran Purchased Russian-Made Sukhoi 35 Fighter Jets," *U.S. News*, January 27, 2025, available at <https://www.usnews.com/news/world/articles/2025-01-27/irans-revolutionary-guards-commander-says-iran-purchased-russian-made-sukhoi-35-fighter-jets>.

⁷⁹ "Full Text Of Iran-Russia Comprehensive Strategic Partnership Agreement," op. cit.

⁸⁰ Ross, op. cit.

⁸¹ "Iran's Nuclear Timetable: The Weapon Potential," *Iran Watch*, September 18, 2024, available at <https://www.iranwatch.org/our-publications/articles-reports/irans-nuclear-timetable-weapon-potential>; David E. Sanger, "Iran Makes 'Dramatic' Leap to Produce Near-Bomb-Grade Fuel, But To What End?," *The New York Times*, December 6, 2024, available at <https://www.nytimes.com/2024/12/06/us/politics/iran-nuclear-fuel.html?searchResultPosition=4>.

as appears to have been the case.⁸² The Houthis may have stopped their attacks on Israel and others because of the earlier cease-fires in Gaza, although they are now resuming them given the renewed fighting.⁸³ Thus the cease-fire in Gaza as virtually every observer expected, proved to be a fragile and temporary makeshift.⁸⁴ Consequently nothing except a campaign that either destroys the Houthis' capability or completely deters Iran and others from supporting them will stop them from resuming these attacks against Israel, international commerce, freedom of navigation, and the West, since their access to missiles and drones, presumably through Iran is still functioning. To be sure, many analyses of the Houthis posit them as a somewhat independent group where the degree of Iranian influence upon them may be less than that possessed over Hamas and Hezbollah. Indeed, the degree of Iranian influence eludes precise definition. Nevertheless, the linkages to Tehran exist and continue as does the supply of weapons. As one analysis noted,

Over the past decade, Iran has emerged as a key regional player in Yemen supporting Ansar Allah (commonly known as the Houthis). In research and policy circles, there are three primary analyses of this relationship. The first exaggerates the extent of Iranian influence in Yemen, considering the Houthis as a regional proxy—a perspective supported by the internationally recognized government and its allies, namely the United States (U.S.) and Saudi Arabia. The second view, representing Iran and its supporters, regards the Houthis as an autonomous entity representing the Yemeni Republic—merely aligned with Iran on certain aims and ideological positions. The third view recognizes a complex relationship between Iran and the Houthis. The group has used Iranian missiles, unmanned aerial vehicles (UAVs), and other weapons “of Iranian origin.” Still, it is not clear whether the relationship is one of subordination or a partnership. Though similar interests do bring them together, other factors clarify the nature of the relationship, which began before the Houthi takeover of Sanaa and escalated after the Saudi-led Arab coalition launched Operation Decisive Storm in March 2015. Nevertheless, the extent of Iran's influence over the war in Yemen remains a subject of debate.⁸⁵

Even so, Iran continues to maintain its support for the members of the axis of resistance and remains the primary source of weapons for the Houthis.⁸⁶

⁸² Carol E.B. Choksy and Jamsheed K. Choksy, “Iran's Nuclear Tipping Point,” *Foreign Affairs*, October 14, 2024, available at <https://www.foreignaffairs.com/iran/irans-nuclear-tipping-point>.

⁸³ “Houthi Missile Triggers Sirens in Central Israel, Is Downed En Route,” *The Times of Israel*, March 30, 2025, available at <https://www.msn.com/en-us/war-and-conflicts/military/houthi-missile-triggers-sirens-in-central-israel-is-downed-en-route/ar-AA1BVPdX>.

⁸⁴ “Fragile Ceasefire Deal Between Israel and Hamas Still Holding,” *NBC News*, January 27, 2025, available at <https://www.nbcnews.com/now/video/fragile-ceasefire-deal-between-israel-and-hamas-holds-230349381976>.

⁸⁵ “Iran's Role In the Yemen War: Real Influence and Regional Gains,” Middle East Council on Global Affairs, April 2024, available at https://mecouncil.org/publication_chapters/irans-role-in-the-yemen-war-real-influence-and-regional-gains/.

⁸⁶ *Ibid.*, and update, December 17, 2024.

Chinese Strategy

Although China is not as visible as Russia or Iran as a supporter of the Houthis, its support is very important to them and to Iran. In fact, the arrangement that has come to pass is quite simple. First, China, by being the largest importer of Iranian oil, is providing Iran with an enormous amount of money:

Over the past four years, Iran exported a total of nearly 1.98 billion barrels of oil, and its annual oil exports have quadrupled during the Biden administration. China is Iran's biggest customer, with more than 90 percent of Iran's exports going to China in 2024. As a result of these exports, Iran's Islamic Revolutionary Guard Corps (IRGC) reportedly received as much as half of the fifty billion dollars in oil revenue that Iran earned last year. In turn, the IRGC uses its funds to support its proxies, including Hezbollah, Hamas, and the Houthis.⁸⁷

The second element in Chinese support for the Houthis arises from the fact that they are able to curtail Chinese shipping in the Red Sea and possibly beyond. Therefore Beijing, placing the safety of its shipping and the opportunity to threaten the West above international solidarity on freedom of the seas, succumbed to blackmail and agreed to provide weapons and necessary technologies to the Houthis directly or through Iran. This episode obviously raises larger questions about China's overall maritime policies in other contested waters. Consequently, "US intelligence sources recently told Israeli media that since November 2023, the Houthis have used Chinese-made components to target Red Sea vessels in exchange for immunity for Chinese-flagged ships."⁸⁸

Worse yet, China has established a complex supply chain allowing the Houthis to receive advanced components and guidance equipment for their ballistic and cruise missiles.⁸⁹ This program also applies to Chinese support for Iranian missiles. For example, China is supplying chemical propellants for Iran's mid-range ballistic missiles that it can use on its own to target American allies in the Middle East or that it can disburse to the Houthis for targeting of international shipping.⁹⁰ In like manner China is apparently supplying the guidance system for Iran's new Arash-2 kamikaze drones, which again could be used by Iran or its proxies against foreign targets.⁹¹

⁸⁷ Tuvia Gering and Jason M. Brodsky, "China Is Supporting the Houthis: Here's How the Administration Can Respond," Atlantic Council, January 14, 2025, available at <https://www.atlanticcouncil.org/blogs/new-atlanticist/china-is-supporting-the-houthis-heres-how-the-trump-administration-can-respond/>.

⁸⁸ Ibid.

⁸⁹ Guy Azriel, "China Helping Houthis Obtain Weapons For Unmolested Red Sea Passage," *i24news*, January 2, 2025, available at <https://www.i24news.tv/en/news/middle-east/artc-china-helping-houthis-obtain-advanced-weapons-for-free-passage>.

⁹⁰ Laurence Norman and Benoit Faucon, "China Is Supplying Chemicals For Iran's Ballistic Missile Program," *The Wall Street Journal*, January 23, 2025, available at <https://www.wsj.com/world/middle-east/china-is-helping-supply-chemicals-for-irans-ballistic-missile-program-ab272ad7>.

⁹¹ Marco Gianniangeli, "China Is 'Guiding' Iran's Deadly New Drones, MoD Scientists Say," *Express*, May 5, 2024, available at <https://www.express.co.uk/news/uk/1895692/China-is-guiding-iran-s-deadly-new-drones-MoD-scientists-say>.

Even more worrisome is the fact that over the course of 2024 and on the basis of sustained Houthi-Chinese deliberations,

Houthi leaders are reportedly planning to manufacture hundreds of cruise missiles capable of striking Persian Gulf states, using these same Chinese components. Washington has repeatedly passed on this information to Beijing since September, including detailed lists of Chinese companies involved in this arms mechanism.⁹²

Considering the combined implications of Iranian strategy, Chinese support for Iran and its proxies, and Russian support that is deeply imbricated with its overall power projection strategy and goals, it becomes clear that there does not need to be a formal Sino-Russian or Sino-Russian-Iranian alliance in place for coordinated attempts to undermine Western interests.

Russian Strategy

Russia, unlike China, is Iran's and the Houthis' principal ally and armorer while it and China are using both Iran and the Houthis as a proxy for their ultimate strategic goals. While China's goal appears to be a permanent commercial-political influence in the Gulf with a possible future military position there, Russia's power projection activities here require a deeper assessment.⁹³ First, the current (March, 2025) Sino-Russian-Iranian naval exercises have now become a matter of routine, suggesting a continuing effort for all three navies not only to cooperate but to augment domain and situational awareness and try out weapons. Thus, these ostensibly and ironically counter-piracy drills that, aim to "enhance military trust and strengthen practical cooperation," will include simulated strikes on maritime targets, visit-board-search-seizure operations and search and rescue drills.⁹⁴ Obviously such exercises provide perfect cover for training in what amounts to piracy operations.

The routinization and ensuing growing sophistication of these drills, coupled with the diplomatic and economic support provided by Russia and China for Iran and its proxies, plus the military assistance given to the Houthis by Iran and China strongly suggests the practical manifestation of an anti-Western and anti-Israeli (the two are for all purposes indistinguishable) alliance in action. In this context, and as stated above, the most disturbing recent action in this region is the Russo-Iranian treaty of January 2025.⁹⁵ Not least this treaty, apart from all of its elements described above, provides a permanent legal and political basis for Russian power projection in the Middle East and beyond through Iran.

⁹² Azriel, op. cit.

⁹³ Blake Herzinger and Ben Lefkowitz, "China's Growing Naval Influence In the Middle East," Washington Institute, February 17, 2023, available at <https://www.washingtoninstitute.org/policy-analysis/chinas-growing-naval-influence-middle-east>.

⁹⁴ Nectar Gan, "Iran, China and Russia Launch Annual Joint Naval Drills As Trump Upends Western Alliances," *CNN*, March 10, 2025, available at <https://www.cnn.com/2025/03/10/asia/iran-china-russia-joint-navy-drills-intl-hnk/index.html>.

⁹⁵ Government Of the Islamic Republic Of Iran, "Full Text Of Iran-Russia Comprehensive Strategic Partnership Agreement," January 17, 2025, available at <https://irangov.ir/detail/456479>.

The fall of Assad in Syria, the defeat of Iran's proxies in Gaza and Lebanon, and this treaty require a greater discussion of Russia's motives for supporting the Houthis. There is no doubt that Russia's motives tie into even grander strategic objectives. As Marlene Laruelle has pointed out, power projection beyond Russia's current boundaries and arguably beyond the old Soviet borders is intrinsic to Russia's spatial and political self-representation as an imperial and global great power.⁹⁶ In addition, there is a belief among many states that if Russia expands its territory, it will gain domestic support or at least quell domestic criticism and the abiding Russian belief that since Russia is permanently under attack from the West, it, as Catherine the Great said, "I had no way to defend its frontiers other than by expanding them."⁹⁷ There is formidable historical, intellectual, ideological, and institutional support for Russia's territorial expansion and global power projection. This drive, as a nineteenth century statesman observed was, in no small measure motivated by "the lure of something erotic in the borderlands."⁹⁸

Consequently, projecting power far beyond its borders is almost literally encoded in the Russian leadership's political DNA. Russian support for Iranian-backed terrorists goes back at least twenty years notwithstanding Russia's previously solid working relationship with Israel.⁹⁹ This includes Yakhont anti-ship missiles sent to Hezbollah through Iran and/or Syria to threaten Israel's Navy in the Mediterranean.¹⁰⁰ More recently, there are reports that Moscow was offering Hezbollah UAV's.¹⁰¹ Russia's ongoing efforts to work with Iran likewise go back decades and the current Iranian provision of thousands of missiles and construction of a factory in Russia, along with ongoing discussions of a partnership agreement, reflect the increasingly intimate Russo-Iran relationship.¹⁰²

More recently, Russia has directly joined with Iran to offer the Houthis arms and intelligence for tracking ships in the Red Sea as part of the Iran-Russia entente that has been strengthened by Iranian support for Russia in its aggression against Ukraine.¹⁰³ Concurrently, as the Houthis advanced in Yemen, they were able to obtain the assistance of

⁹⁶ Marlene Laruelle, *Ideology and Meaning-Making Under the Putin Regime* (Stanford, CA: Stanford University Press, 2025), pp. 211-216.

⁹⁷ *Wisdomly*, available at <https://www.wisdomly.net/catherine-the-great-3707.php>.

⁹⁸ Quoted in Stephen Blank, "Putin's Twelve-Step Program," *Washington Quarterly*, Vol. 25, No. 1, 2002, pp. 147-160, available at <https://muse.jhu.edu/article/36662/summary>.

⁹⁹ "Israel: Hezbollah Used Russian-Made Missiles," *NBC News*, August 18, 2006, available at <https://www.nbcnews.com/id/wbna14410480>.

¹⁰⁰ "Russia To Sell Syria Anti-Ship Cruise Missiles," *BBC*, September 17, 2010, available at <https://www.bbc.com/news/world-middle-east-11347495>.

¹⁰¹ Seth J. Frantzman, "Iran's Multi-Front Battle: How Teheran Is Feeding An Octopus War Against Israel-Analysis," *The Jerusalem Post*, October 10, 2024, available at https://www.fdd.org/analysis/op_ed/2024/10/10/irans-multi-front-battle-how-tehran-is-feeding-an-octopus-war-against-israel/.

¹⁰² Emil Avadliani, "Iran and Russia Seek to Reshape Global Hegemony with New Bilateral Agreement," Jamestown Foundation, November 4, 2024, available at <https://jamestown.org/program/iran-and-russia-seek-to-reshape-global-hegemony-with-new-bilateral-agreement/>.

¹⁰³ Benoit Faucon and Thomas Grove, "Russia Provided Targeting Data For Houthi Assault On Global Shipping," *The Wall Street Journal*, October 24, 2024, available at <https://www.wsj.com/world/russia-provided-targeting-data-for-houthi-assault-on-global-shipping-eabc2c2b>.

Hezbollah (obviously with Tehran's blessing) and an arsenal of Soviet and Russian weapons before 2020.¹⁰⁴ Iran has also clearly been transferring Russian weapons to the Houthis for at least a decade and integrated the Houthis into its axis of resistance even though it appears that they do not fully control them.¹⁰⁵ Beyond arms sales, GRU operatives posing as humanitarian aid workers have been reported to be working with the Houthis in Sanaa, Yemen's capital.¹⁰⁶

While Moscow's arms sales gambit reflects a departure from its previous efforts to mediate the Yemeni civil war, it is consonant not only with the imperatives of support for Iran and anti-Westernism that the war in Ukraine has intensified but also with ongoing regional strategic goals dating back at least to the 1970s.¹⁰⁷ Moscow's heightened interest in supporting the Houthis is tied to larger strategic imperatives of Russian policy beyond Ukraine. Russia, for instance, is not content merely to have acquired (or more accurately re-acquired) a naval base in Sudan, but has spent over a decade seeking naval bases elsewhere around the Red Sea, Mediterranean, and the Horn of Africa.¹⁰⁸ Now its most recent naval doctrine proclaims the Indian Ocean as a strategic priority.¹⁰⁹ So despite the navy's likely straitened future circumstances, Russia is likely to build on efforts already undertaken to gain bases in and around the Indian Ocean, including the Red Sea.¹¹⁰

Undoubtedly Moscow also will want air bases in or around these waters too. Such bases will enable Russia to exercise much greater leverage—over all shipping, not just the energy-related trade—in the Persian Gulf, Red Sea, and Indian Ocean, and to project firepower deep into the Middle East and even the Mediterranean. But beyond these motives it is clear that another reason for Russia's power projection dreams is the lure of exploiting (and that is too anodyne a word) the immense natural resources of this region. Thus, Russia has smuggled billions of dollars of Sudan's gold out of the country in 16 flights since February 2020 to enrich its elites, strengthen its economy and continue to pay for its aggression against Ukraine.¹¹¹ It is doing so in collusion with Sudan's "beleaguered military leadership" to accomplish this mission and create thereby an enduring leverage in Sudan replete with

¹⁰⁴ Knights, op. cit.

¹⁰⁵ Ibid.; DIA Report, op. cit.

¹⁰⁶ Sean Matthews, "Exclusive: US Intelligence Suggests Russian Military Is Advising Houthis Inside Yemen," *Middle East Eye*, August 2, 2024, available at <https://www.middleeasteye.net/news/exclusive-russian-military-advising-houthis-inside-yemen-us-intelligence-suggests>.

¹⁰⁷ Ruslan Suleymanov, "Why the Kremlin Is Drifting Closer to Houthi Rebels in Yemen," Carnegie Endowment, September 12, 2024, available at <https://carnegieendowment.org/russia-eurasia/politika/2024/09/yemen-russia-middle-east-cooperation?lang=en>.

¹⁰⁸ Stephen Blank, "Gunboat Diplomacy à la Russe: Russia's Naval Base in Sudan and Its Implications" *Defence and Security Analysis*, Vol. XXXVIII, No. 2, 2022, pp. 470-489.

¹⁰⁹ "Об утверждении Морской доктрины Российской Федерации" ("On approval of the Maritime Doctrine of the Russian Federation"), July 31, 2022, available at <http://publication.pravo.gov.ru/Document/View/0001202207310001?index=1&rangeSize=1>.

¹¹⁰ Stephen Blank, "Russia's Efforts to Play in the Indian Ocean Basin," New Lines Institute, June 17, 2021, available at newlinesinstitute.org/united-states/russias-efforts-to-play-in-the-indian-ocean-basin/.

¹¹¹ Nima Elbagir et al, "Russia Is Plundering Gold In Sudan To Boost Putin's War Effort In Ukraine," *CNN*, July 29, 2022, available at <https://www.cnn.com/2022/07/29/africa/sudan-russia-gold-investigation-cmd-intl/index.html>.

efforts to gain a naval base there.¹¹² Obviously naval presence, with all that such presence connotes in the way of supporting infrastructure in and around the Horn of Africa, is essential to this and other previous similar operations.

As Candace Rondeaux has written, “The Russian naval hub will likely be a critical node for Sudanese gold exports, which have proven a boon not only for several mining companies linked to (Yevgeny) Prigozhin (leader of the Wagner PMC-Russia’s ostensibly private military firm-author) but this time for Russian state coffers. Russia has invested heavily in building up its gold reserves to help stabilize the ruble and future proof its economy against harsher Western sanctions.”¹¹³ Moreover, Russia’s Wagner PMC, ostensibly a proxy force but actually an extension of the Kremlin (and now controlled directly by it through the GRU, which has renamed it “Afrika Korps”) is not above using force to obtain control over these resources, e.g., attacking artisanal mines in the lawless border zones between Sudan and the Central African Republic.¹¹⁴

Meanwhile in return for the base, Sudan will receive arms. However, while Sudan will not receive any rent for the base, Sudanese companies received contracts and jobs for protecting the base and gained the experience of working with Russians. These terms reveal the interpenetration of economic motives and covert, influence, and information operations—often conducted by the same people and organizations—to achieve military and strategic goals.¹¹⁵ Consequently, Rondeaux has observed that “one of the most important takeaways is that Russia appears to have built a durable method for conducting war on the cheap in a strategically significant part of North Africa.”¹¹⁶ But this entire process of arms sales, large-scale corruption of elites, and colonialist exploitation is also a mechanism for conducting a contemporary version of old-fashioned gunboat diplomacy with the objective of permanently projecting power, e.g., through naval and arms bases.

This opening of a country or region to large-scale economic-political penetration through foreign naval presence reflects a particularly naked colonialism and gives the lie to Moscow’s pretensions that it has no colonialist history in general or in Africa.¹¹⁷ Neither will Russia’s activities in this region change when the war ends, assuming no change in the present governmental structure, for corruption is arguably one of the powerful adhesive factors that

¹¹² Ibid.

¹¹³ Candace Rondeaux, “How a Man Linked to Prigozhin, ‘Putin’s Chef,’ Infiltrated the United Nations,” *The Daily Beast*, November 27, 2020, available at <https://www.thedailybeast.com/how-a-man-linked-to-prigozhin-putins-chef-infiltrated-the-united-nations/>.

¹¹⁴ Jason Burke and Zeinab Mohammad Salih, “Russian Mercenaries Accused Of Deadly Attacks On Mines On Sudan-CAR Border,” *The Guardian*, June 21, 2022, available at <https://www.theguardian.com/world/2022/jun/21/russian-mercenaries-accused-of-deadly-attacks-on-mines-on-sudan-car-border>.

¹¹⁵ Amy McKinnon, Robbie Gramer, Jack Detch, “Russia’s Dreams Of a Red Sea Naval Base Are Scuttled—For Now,” *Foreign Policy*, July 15, 2022, available at <https://foreignpolicy.com/2022/07/15/russia-sudan-putin-east-africa-port-red-sea-naval-base-scuttled/>.

¹¹⁶ Rondeaux, op. cit.

¹¹⁷ Ibid.; Casey Michel, “Russia’s Crimes Of Colonialism,” *The Wall Street Journal*, August 9, 2022, available at <https://www.wsj.com/articles/russias-crimes-of-colonialism-putin-ukraine-war-empire-eurasia-lavrov-africa-soviet-union-11660076835>.

holds this regime together, especially in view of the inveterate rapacity of the Russian elite as described by Russian writers.¹¹⁸

Thus, apart from consolidating a global presence that allows it to represent itself at home and abroad as a great power, Moscow seeks permanent bases and influence in and around the Indian Ocean with which to loot vulnerable African polities and place pro-Western allies and navies under permanent pressure either from Russian strikes or those of its proxies. And the West, with its vulnerable global commerce and allies like Israel, represent targets that are too tempting not to attack provided it can be done asymmetrically at minimal risk to Russia and/or its proxies.

How Should the United States Respond?

The principle of freedom of the seas has been a cornerstone of American policy since the establishment of the republic in 1775 and the United States went to war in 1812 and 1917 to defend it. Hence, it is no surprise that once again it has fallen to the United States and its navy to take the lead in defending this principle by attacking the Houthis, namely with naval-based air and/or missile strikes like those that occurred on March 15. Nevertheless, this internationally recognized principle should be enforced not by Washington alone but by a coalition of like-minded states acting under U.S. leadership. And that means both diplomatic and military actions synchronized together to stop the Houthis and their patrons while restoring conventional deterrence.

To be sure, Israel has also sometimes retaliated against Houthi missile strikes on Israeli targets. But none of the attempts to defend freedom of the seas or strike at these rebels seem to have deterred them. Moreover, since the Houthis and their patrons in Tehran seem not to have assimilated the full import of the message that their strategy has collapsed everywhere else, it is necessary to find both an efficient and effective means of deterring them in the future. And for that, a coalition is absolutely necessary.

Iranian strategy, involving its own forces and these three terrorist militaries, Hamas, Hezbollah, and the Houthis, served multiple purposes while constituting Tehran's axis of resistance. They were to confront Israel and exercise constant pressure upon it from multiple axes: Gaza, Syria, Lebanon, and the Red Sea. Their presence in these contested areas also served to deter Arab states from either forging new relations with Israel or threatening (particularly with U.S. backing or presence) Iran. In other words, Iranian strategy aimed to keep the Middle East in a permanently destabilized position. That strategy is in ruins, not least due to the fall of Assad which complicates both Iranian and Russian policies. Iran and its partners provided these groups with weapons and logistical support, much of it running through Syria, the real logistical lynchpin of this strategy. As Hassan Shemshadi, an expert

¹¹⁸ Oleg Kashin, "Who Will Get Rid Of Putin? The Answer Is Grim," *The New York Times*, August 18, 2022, available at <https://www.nytimes.com/2022/08/18/opinion/russia-putin-corruption.html>; Alexander Golts, "Why Russia Smuggles US Electronics," *Moscow Times*, October 9, 2012, available at <https://www.themoscowtimes.com/archive/why-russia-smuggles-us-electronics>.

on Iran's proxy militant groups has observed, "Everything that Iran sent to the region went through Syria. It is now extremely difficult to keep these channels open."¹¹⁹

Ultimately however, the purpose of arming these groups and deploying them to deter both Arab and Israeli, as well as Western, pressure on Iran, went beyond regional destabilization to weaken Israel in preparation for what Iranian strategists believed and hoped would be a final struggle.¹²⁰ In this strategic perspective, Iran's accession to the status of nuclear power with a functioning nuclear arsenal, a goal to which Iran has now come very close, would allow it to extend nuclear and conventional deterrence to the members of the axis of resistance in order to move forward with its ultimate goal of destroying Israel.¹²¹

Deterring the Houthis: The U.S. Dilemma

Obviously, there are no grounds for complacency here. Iran has defied President Trump's maximum pressure campaign and threats of military action against Iran that it (probably correctly) interpreted as an ultimatum.¹²² At the same time, Iran recently held a Deputy Foreign Ministerial meeting with Russia and China in Beijing to discuss nuclear energy and removal of sanctions, i.e. its nuclear program. This meeting also comes in the wake of Russia's typically self-serving declaration of its willingness to play a mediating role between Washington and Tehran.¹²³ Predictably it ended in a show of support for Iran arguing for a U.S. return to nuclear diplomacy with Iran.¹²⁴ Worse yet,

China and Russia welcomed Iran's reiteration that its nuclear programme is exclusively for peaceful purposes and not for development of nuclear weapons, and also welcomed Iran's commitment to full compliance with its obligations under the NPT and Comprehensive Safeguard Agreement, supported Iran's policy to continue cooperation with the International Atomic Energy Agency (IAEA), and stressed the need to fully respect Iran's right to peaceful uses of nuclear energy as a State Party to the NPT. The three countries stressed the necessity for all States to refrain from

¹¹⁹ Farnaz Fassihidi, "In the Syrian Regime's Hour of Need, Its Patron Iran Makes an Exit," *The New York Times*, December 8, 2024, available at <https://www.nytimes.com/2024/12/07/world/middleeast/iran-syria-rebels.html?searchResultPosition=1>.

¹²⁰ Bernard Haykel, "The Implications Of Iran's Failed Proxy Strategy," The Hoover Institution, December 10, 2024, available at <https://www.hoover.org/research/implications-irans-failed-proxy-strategy>.

¹²¹ "Iran's Nuclear Timetable: The Weapon Potential," *Iran Watch*, September 18, 2024, available at <https://www.iranwatch.org/our-publications/articles-reports/irans-nuclear-timetable-weapon-potential>; Sanger, op. cit.

¹²² "Iran Pezeshkian Bashes Trump Threat: 'Do Whatever the Hell You Want,'" *Iran International*, March 12, 2025, available at <https://www.iranintl.com/en/202503119046>.

¹²³ Seth J. Frantzman, "Iran, Russia, China Set To Discuss Iran's Nuclear Program In Meeting," *The Jerusalem Post*, March 12, 2025, available at <https://www.jpost.com/middle-east/iran-news/article-845749>.

¹²⁴ "Joint Statement of the Beijing Meeting between China, Russia and Iran," March 14, 2025, available at https://www.fmprc.gov.cn/eng/xw/wjbxw/202503/t20250314_11575903.html#:~:text=China%20and%20Russia%20welcomed%20Iran's,supported%20Iran's%20policy%20to%20continue.

any action that undermines the technical, objective and impartial work of the IAEA.¹²⁵

Since the right-wingers in Iran have clawed their way back into dominating the government, it is unlikely that these talks will lead to Iran's willingness to negotiate an end to its nuclear program which is what the White House is demanding. Furthermore, the convening of this meeting, whatever its outcome, confirms the "triple entente" among these powers and their willingness to countenance the Iranian nuclear program that hitherto they have opposed for it is quite unlikely that Iran will enter into sincere negotiations with the United States. And just as Iran continues to insist on going forward with its nuclear program, it is equally likely to persist in rebuilding its terrorist proxies. Senior level Iranian officials claimed victory for Hamas because it "forced" Israel to accept a ceasefire when it "preemptively defend itself against the West and Israel" in 2023.¹²⁶ Furthermore the Houthis' leader has now announced that they will immediately resume attacks on Israeli ships traversing the Red Sea and the Bab-El-Mandab because Israel has cut off aid to Hamas due to Hamas' stalling on cease-fire terms.¹²⁷ It is quite likely that this statement precipitated Trump's decision to strike the Houthis unilaterally.

Obviously, it appears that there is no longer any room for diplomacy with the Houthis and quite possibly with Iran as well. And since Iran, not to mention China and Russia stand behind them both, the Houthis' and Iran's intransigence poses considerable strategic and operational problems for Israel, the West, and the United States. The Houthis are both pirates and terrorists. Whatever their motives may be, they are unquestionably Iranian and more indirectly Russian and Chinese pirates. Together these actors represent a threat to Israel, Arab states, particularly Saudi Arabia, overall security in and around the Red Sea, the Indian Ocean, and the Gulf, and to the hallowed principle of freedom of navigation and of the seas, principles for which the United States went to war in 1812 and 1917.

In addition, as recent reporting on the Sino-Houthi connection has revealed, the Houthis aim to build an autonomous chain starting in China that will allow them to conduct terrorism and piracy at will throughout these waters.¹²⁸ Lastly, their strategy until now has been a quintessentially cost-imposing strategy where they use cheap drones and anti-ship missiles to terrorize and loot international shipping in and around the Red Sea while Israel and other powers have to use expensive sea or air-based missiles against them and keep a long-term

¹²⁵ Ibid.

¹²⁶ A. Savyon, "senior-iranian-regime-officials-claim-victory," *MEMRI*, March 12, 2025, available at <https://www.memri.org/reports/senior-iranian-regime-officials-claim-victory-iran-led-resistance-axis-saying-palestinian>.

¹²⁷ "Houthis To Resume Attacks On Israeli Ships After Gaza Aid Deadline Ended," *The Jerusalem Post*, March 12, 2025, available at https://www.jpost.com/breaking-news/article-845682?utm_campaign=6710194-Press%20Releases&utm_medium=email&_hsenc=p2ANqtz--INjgQTakATwgrlBBKkaQZLG8YWwyR7KzTUzmao0b0Q7oRi3aoIwLww7Df1y4MBI70nvAURTeQl-nHUpnOe9urclg8Mg&_hsmi=351561873&utm_content=351561873&utm_source=hs_email.

¹²⁸ Azriel, op. cit.

flotilla on deployment against them.¹²⁹ Should they achieve the autonomous supply chain being set up with China and simultaneously come under the protection of potential extended Iranian deterrence, the problems this will present to Washington and its allies will grow by an order of magnitude. So, time is of the essence in dealing with the Houthis if not Iran, especially as the Trump Administration is taking a much stronger line on terrorism, and anti-Semitism.

Operationally, therefore, the problem is one of reestablishing a lasting conventional deterrence of both the Houthis and their Iranian patrons. But strategically, the problems are bigger—linking termination of Iran’s nuclear and proxy strategies by the credible threat of military power and thereby restoring deterrence to the region. Moreover, that deterrence must be consolidated before Iran obtains a usable nuclear weapon. In other words, it needs to be done soon. A recent study argues that the only reliable way to ensure that Iran does not get such a weapon is a U.S. policy of regime change but that seems problematic.¹³⁰ Moreover, such a policy is inherently escalatory and open-ended, and as past experience shows, likely to lead to prolonged conflict. Therefore, the use of American military force must be coordinated with a political strategy to maximize pressure on Iran and the Houthis by virtue of a genuine coalition that is willing to assume both a political and military role towards these objectives.¹³¹ Unilateralism may feel good or provide immediate relief but it cannot eliminate either problem for the long term, which is the real payoff. Neither does adding Israeli forces alone to the mix suffice strategically despite Israel’s formidable capabilities because this does not suffice to create the necessary political scaffolding for achieving a lasting result.

So, while it is advisable to terminate Iran’s nuclear forces sooner rather than later; doing so must be done as part of a legitimate strategic and policy initiative. Thus, this paper recommends that, following the advice of Ariel Sharon that “terrorism has an address” to which the mail should be sent, the United States should undertake the following steps consistent with the policy of maximum pressure, especially as it is clear from past experience that Iran will not negotiate about its nuclear weapons in good faith.¹³² First, the United States must build a lasting coalition that should, if possible, unite regional actors like Israel, Egypt, and Saudi Arabia as well as foreign powers like the United States and UK.

Second, Washington and its partners should stand up a multi-national fleet under American command, i.e., with a U.S. flagship, combining both Israeli and Arab naval assets, as part of an effort to expand the Abraham Accords to patrol the Red Sea and Straits of Hormuz as well as the waters between them to forestall and counter-strike any Houthi attacks. Given the importance of the area and regional trade to Israel, Egypt, and Saudi

¹²⁹ Ziezulewicz, op. cit.

¹³⁰ Masoud Kazemzadeh, “U.S.-Iran Confrontation After the Hamas-Israel War: Proxy Wars, Nuclear Strategy, and Eschatology,” *Journal Of Policy & Strategy*,” Vol. 5, No. 1 (Fairfax, VA: National Institute Press, 2025), pp. 41-55, available at <https://nipp.org/wp-content/uploads/2025/03/Analysis-Kazemzadeh-5.1.pdf>.

¹³¹ Ross, op. cit.

¹³² William Safire, “Essay: Terrorism Has An Address,” *The New York Times*, November 10, 1983, available at <https://www.nytimes.com/1983/11/10/opinion/essay-terror-has-an-address.html>.

Arabia this diplomatic task may require tough bargaining, but it will make the coalition stronger and more credible as well as more enduring. This also means providing this maritime force with the requisite capabilities to conduct a sustained air attack if necessary. Sustained drone attacks that are cheaper and less susceptible to a cost-imposing strategy are preferred because the costs of prolonged air strikes are large and ultimately unsustainable, a fact that plays to the Houthis' and Iran's strategy. The weapons used by these forces must aim to destroy, not just strike at, the Houthi command, control, communications and forces as well as its logistics. If necessary, added air capabilities could be brought in from neighboring countries or their air bases that host U.S. aerial assets, preferably cheap drones, for this purpose. It also is important to deny the Houthis the chance to strike or destroy an American ship.

To achieve these objectives, the entire coalition must now issue a public as well as private warning to Iran (which its patrons and proxies will both understand) that it will be held accountable for any hostile actions by the Houthis, Hezbollah, or Hamas. Therefore, should such actions occur, the coalition will strike at and destroy as much as possible of Iran's conventional and nuclear capability. Thus, Iran will be held permanently hostage for its behavior towards its allies and will suffer a cost-imposing strategy in line with Sharon's maxim. This approach will cut off the head of the snake, i.e., the Houthis' foreign logistical and thus economic-political support, because for China and Russia the costs of supporting Iran and its proxies will now also go up by a very large order of magnitude.

While the Trump Administration has adopted some of these points by striking hard at the Houthis in a sustained manner and by tying the Houthis' behavior to that of Iran in regard to both terrorism and nuclear acquisition, absent the requisite political dimension it could likely fail to effect a lasting strategic change. Middle Eastern history and Clausewitz suggest strongly that not correlating force and politics is a guarantee of failure, something that has bedeviled too many prior instances of American unilateralism.¹³³

Arguably this strategy reverses the unfavorable cost ratios that now exist and places the onus of retaliation upon Iran in the face of a vastly superior conventional deterrent. This will bring home to Iran, as few other threats have, the real cost of going nuclear to threaten Israel, its neighbors and other states while also extending deterrence to large-scale, foreign armed terrorist formations like Hamas and the Houthis. As many have suggested, the answer to the Houthis is cutting off their weapons and other supplies from abroad, as that is their sole source of advanced weaponry.¹³⁴ This posture does so, and it also aims to thwart Iran's nuclear program by making it a hostage of the Houthis' and other Iranian proxies, as well as Iran's good behavior. This program accords with President Trump's maximum pressure campaign but leaves open the prospect of a genuine negotiation that eliminates Iran's nuclear program for good and returns it to careful IAEA supervision and monitoring while also forestalling renewed outbreaks of terrorism across the Middle East. Most of all, it

¹³³ Ross, *op. cit.*

¹³⁴ Jake Epstein, "The Houthis Couldn't Have Built Their Most Dangerous Weapons Without Help From Iran and Others, UN Experts Find," *Yahoo!News*, November 5, 2024, available at <https://www.yahoo.com/news/houthis-couldnt-built-most-dangerous-194150230.html>.

creates a strong and enduring coalition led by Washington to achieve all these objectives and thus a lasting strategic success.

The strikes that began on March 15 already indicate a partial implementation of this strategy. By redesignating the Houthis as a foreign terrorist organization, the State Department will therefore pay up to \$15 million for information leading to the disruption of Houthi financing. This, like the air strikes, puts Iran on notice that it will be held accountable for the Houthis' actions and disrupt the Houthis' access to global financial networks. It also strengthens the legal basis under which Washington and its allies could undertake military operations against the Houthis while also targeting Houthi leaders and suppliers. It thus justifies military operations in the Red Sea and Gulf of Aden and helps protect international trade in these waters.¹³⁵ However, these strikes cannot be continued forever, especially if they are unilateral and absent any political support from within the region. While it is easy and temporarily satisfying to order air strikes, if they are not backed up by the forging of a lasting and strong coalition to enforce deterrence upon Iran and its proxies this, like too many past American operations in the Islamic world, will be a destructive but passing sandstorm, not the path to a new order. And nobody will benefit from that except the West's enemies.

Conclusion

As of late April 2025, when this article is being completed, the strikes against the Houthis continue.¹³⁶ Moreover, Washington has had to send a second carrier group to the Indian Ocean to reinforce its attacks.¹³⁷ These facts do more than underscore the tenacity of the Houthis, they also show that its cost-imposing strategy is still effective despite suffering considerable damage. This point, conversely, shows the inadequacy of the Administration's strategy. It failed to outline a discernible or attainable political outcome in the Red Sea that would deter the Houthis in the future. It also failed to bring about a genuine regional alliance of stakeholders to sustain that deterrence. Thus, these attacks merely amount to a prolonged tactical tantrum that cannot be sustained in the long term absent formation of an effective regional coalition.

This operation represented a test of regional conventional deterrence. But if this deterrence is attempted in the absence of any clear political objective, i.e., if it violates Clausewitz's most famous imperative that war is the continuation of policy by military means and that the nature of the policy objective should govern the conduct of military operations,

¹³⁵ Dalia Al-Aqidi, "The Houthis' Four-Year Honeymoon Is Over," *Arab News*, March 13, 2025, available at <https://www.arabnews.com/node/2593434>.

¹³⁶ "Houthi Say Group Downed US Drone In Northwest Yemen As US Strikes Continue," *Al Jazeera*, April 22, 2025, available at <https://www.aljazeera.com/news/2025/4/22/houthi-say-group-downed-us-drone-in-northwest-yemen-as-us-strikes-continue>.

¹³⁷ Riley Ceder, "Second Aircraft Carrier On the Way To Join Fight Against Houthis," *Navy Times*, March 27, 2025, available at <https://www.navytimes.com/news/your-navy/2025/03/27/second-aircraft-carrier-on-the-way-to-join-fight-against-houthis/>.

then those operations are foredoomed. There may still be time to retrieve these errors, particularly if the current negotiations with Iran oblige it to cease promoting regional terrorists. But that is frankly unlikely as Iran now enjoys strong Russo-Chinese support and they clearly want the Houthis to succeed. Moreover, Iran's neighbors now want the United States to make a deal with Iran.¹³⁸ Finally a deal with Washington will enhance the beleaguered Iranian regime's domestic standing and reduce if not eliminate the need to stop its strategy of employing terrorist proxies abroad given its foreign support and Washington's reluctance to become further involved. If this is indeed the case, and it certainly appears to be so, then this operation will indeed become a lesson for future students. But it will not be a happy lesson for us or for those students.

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¹³⁸ Mona Hojat Ansari, "Where Do Arabs Stand On Iran-US Talks," *Tehran Times*, April 21, 2025, available at <https://www.tehrantimes.com/news/512138/Where-do-Arabs-stand-on-Iran-US-talks>.



ANALYSIS

THE DISORDERLY ADVENT OF THE TRIPOLAR NUCLEAR ORDER

Wannes Verstraete

Introduction

Former Acting Assistant Secretary of Defense for Space Policy, Dr. Vipin Narang, stated on August 1, 2024, that the United States is facing a “multiple nuclear challenger problem” with Russia as a nuclear peer, the People’s Republic of China (PRC) becoming a nuclear peer, and the Democratic People’s Republic of Korea (DPRK) further developing its nuclear capabilities.¹ Compared to the rather benign nuclear threat environment that emerged after the Cold War (once the nuclear implications of the dissolution of the USSR had been resolved), the United States and its Allies find themselves today in an unstable interregnum towards a new global nuclear order. Therefore, this article aims to focus on the concept of nuclear polarity and the role of non-material factors in the current transition period towards a tripolar nuclear order with three nuclear peers, namely the United States, Russia, and the People’s Republic of China.

In the context of the academic and policy debate on polarity, it is useful to not only focus on the static distribution of forces but also to look at the transition period or the dynamics of power relations between orders.² The study of balance-of-power dynamics—with Robert Gilpin’s book *War and Change in World Politics* as an influential study in the field—remains an essential topic for the academic discipline of International Relations.³ As a result, observing and analyzing the dynamics of global nuclear power relations between nuclear orders enhances the understanding of the current situation.

The next section, therefore, reviews polarity as a description of the global power distribution and the current debate on whether the international system is (partially) unipolar, bipolar, or multipolar. This is followed by a discussion on nuclear polarity as a description of global nuclear deterrence relationships. The focus lies here on the emergence of nuclear tripolarity with China as a third pole, next to the United States and Russia. However, nuclear tripolarity has not arrived yet. Subsequently, the current unstable interregnum between nuclear bipolarity and tripolarity and the role of non-material factors is explained in the fourth section.

If we focus on the non-material factors, some signs already point towards such a dangerous interregnum. Nuclear diplomacy, related to the arms control and non-proliferation regime, is becoming more difficult, for instance. Democracies are more prone

¹ Vipin Narang and Heather Williams, “Nuclear Threats and the Role of Allies: A Conversation with Acting Assistant Secretary Vipin Narang,” *Center for Strategic and International Studies*, August 1, 2024, available at <https://www.csis.org/analysis/nuclear-threats-and-role-allies-conversation-acting-assistant-secretary-vipin-narang>.

² Jonathan Kirshner, *An Unwritten Future: Realism and Uncertainty in World Politics* (Princeton: Princeton University Press, 2022).

³ Robert Gilpin, *War and Change in World Politics* (Cambridge: Cambridge University Press, 1981).



to domestic pressure regarding disarmament than autocracies, with potentially devastating consequences for the security of the former. And Russia's irresponsible nuclear behavior could be explained by a mix of fear, pride, and overconfidence. The conclusion emphasizes the role of leadership, next to rebalancing the nuclear deterrence equilibrium, to stabilize the transition phase between nuclear orders.

Polarity

Regarding the question of polarity as a description of global power distribution, Stephan G. Brooks and William C. Wohlforth argue that the world remains unipolar. They acknowledge, however, that compared to the situation in the 1990s, the United States lost some of its power. Subsequently, Brooks and Wohlforth describe the current order as "partial[ly] unipolar."⁴ Fareed Zakaria also acknowledges that "The United States remains the single strongest country when adding up all hard-power metrics." Nevertheless, he also argues that the current order is a "post-American world."⁵ Others, such as Cliff Kupchan, state that the world is going back towards bipolarity, with the United States being one pole and the People's Republic of China as the other.⁶

Some claim, however, that world politics has evolved to a multipolar order. Richard N. Haass and Charles A. Kupchan state that *Pax Americana* (or U.S. primacy) is "running on fumes," and that bipolarity with the United States and China as poles or *Pax Sinica* are nonstarters. They argue in favor of creating a "global concert of major powers," similar to the 19th-century Concert of Europe, with six members, namely China, the European Union, India, Japan, Russia, and the United States.⁷

The French classical realist Raymond Aron's views on polarity in the international system—described in *Peace & War* from 1966—added an extra dimension, next to the distribution of power. The "configuration of the relation of forces" in the international system leads to the mentioned division between a bilateral and multilateral configuration.⁸ However, Aron inserts another dimension based on ideas and emotions because these "influence the decisions of the actors." Subsequently, Aron argues that we also need to look at the behavior of the poles, or "the nature of the states and the objectives sought by those in

⁴ Stephan G. Brooks and William C. Wohlforth, "The Myth of Multipolarity: American Power's Staying Power," *Foreign Affairs*, April 18, 2023, available at <https://www.foreignaffairs.com/united-states/china-multipolarity-myth>.

⁵ Fareed Zakaria, "The Self-Doubting Superpower: America Shouldn't Give Up on the World It Made," *Foreign Affairs*, December 12, 2023, available at <https://www.foreignaffairs.com/united-states/self-doubting-superpower-america-fareed-zakaria>.

⁶ Cliff Kupchan, "Bipolarity is Back: Why It Matters," *The Washington Quarterly*, Vol. 44, No. 4, 2021, pp. 123–139, available at <https://doi.org/10.1080/0163660X.2021.2020457>.

⁷ Richard N. Haass and Charles A. Kupchan, "The New Concert of Powers: How to Prevent Catastrophe and Promote Stability in a Multipolar World," *Foreign Affairs*, March 23, 2021, available at <https://www.foreignaffairs.com/articles/world/2021-03-23/new-concert-powers>.

⁸ Raymond Aron, *Peace & War: A Theory of International Relations* (London and New York: Routledge, [1966] 2017), p. 95.

power.”⁹ This leads to the difference between homogeneous and heterogeneous systems. He defines the former as systems “in which the states belong to the same type, obey the same conception of policy”, and the latter as systems “in which the states are organized according to different principles and appeal to contradictory values.”¹⁰

Aron stated as examples that the European system preceding the French Revolution consisted of a combination of multipolarity and homogeneity, and the global system during the Cold War was a heterogeneous and bipolar system.¹¹ If we apply these dimensions to the current international system, the abovementioned discussions show that the jury is still out on whether the current order is (partially) unipolar, bipolar or multipolar. However, regarding the second dimension, we can observe a move away from a homogeneous system—the liberal, rules-based order—towards a more contested heterogeneous system with increasing tensions between democratic and authoritarian regimes.

Nuclear Polarity

While there are power and regime differences between the United States, China, and Russia, the nuclear side of the story is also crucial to consider. Multiple authors have recently been discussing the issue of nuclear multipolarity or tripolarity. It is important to note that, according to James M. Acton, the concept of polarity here is used “to describe the structure of deterrence relations; it is not used in its more common political science sense to describe the broader distribution of power in the international system.”¹²

Thus, moving to nuclear polarity, Paul Bracken argues that “Today’s world is not simply nuclear *and* multipolar.”¹³ The global world order is now a nuclear multipolar system because nuclear weapons proliferated “beyond the nuclear powers of the Cold War.”¹⁴ Furthermore, on a regional level, he describes the security system in Asia as “pentapolar,” consisting of China, Russia, the United States, Japan, and India as major powers.¹⁵ Stacie Pettyjohn and Jennie Matuschak argue that the world is “entering an unprecedented multipolar nuclear world where the United States must simultaneously deter two nuclear great powers.”¹⁶ Next to implications for deterrence, the emergence of nuclear multipolarity also has implications for arms control, non-proliferation, and disarmament. Rebecca Davis

⁹ Ibid., p. 99.

¹⁰ Ibid., p. 100.

¹¹ Loc cit.

¹² James M. Acton, “Chapter Five: Nuclear multipolarity,” *Adelphi Series*, Vol. 50, No. 417, 2011, p. 83, available at <https://doi.org/10.1080/19445571.2010.567047>.

¹³ Emphasis in the original: Paul Bracken, “Our Complicated and Dangerous Multipolar Nuclear World,” *Orbis*, Vol. 64, No. 1, 2020, p. 132, available at <https://doi.org/10.1016/j.orbis.2019.12.009>.

¹⁴ Ibid., p. 133.

¹⁵ Ibid., p. 146.

¹⁶ Stacie Pettyjohn and Jennie Matuschak, *Long Shadows: Deterrence in a Multipolar Nuclear Age* (Washington, D.C.: Center for a New American Security, 2022), p. 25, available at <https://s3.us-east-1.amazonaws.com/files.cnas.org/documents/CNAS-Report-Nuclear-Deterrence-Final.pdf>.

Gibbons and Stephen Herzog argue in this regard that “the nuclear nonproliferation regime based around the NPT [Non-Proliferation Treaty] will likely be weakened by changes in the global distribution of power.”¹⁷

The United States and Russia remain the two major nuclear powers with the biggest arsenals.¹⁸ Nevertheless, China is modernizing and building up its nuclear arsenal. Eventually, China will likely reach parity regarding deployed warheads—1,500—in 2035.¹⁹ This development results in the emergence of the two-peer problem or nuclear tripolarity, whereby the United States will have to deter two nuclear peers cooperating against it simultaneously, namely Russia and China.²⁰ M. Taylor Fravel, Henrik Stålhane Hiim, and Magnus Langset Trøan claim that the expansion of the Chinese nuclear arsenal is “less a shift in Chinese intentions than a response to what Beijing perceives as threatening changes in U.S. nuclear strategy.” Therefore, they see the start of a “dangerous action-reaction cycle” that could result in a “major nuclear arms race.”²¹ In contrast, Matthew Costlow, Robert Peters, and Kyle Balzer argue that the arms race metaphor is a “simplistic disfigurement of a complicated reality.” They argue that nuclear restraint by the United States will not stop the expansion and modernization of the Chinese and Russian nuclear arsenals based on historical Cold War experiences. Subsequently, Costlow, Peters, and Balzer are proponents of reinserting the hedging role for US nuclear weapons.²²

This two-peer problem is currently one of the main nuclear deterrence issues in policy and academic circles. *America's Strategic Posture: The Final Report of the Congressional Commission on the Strategic Posture of the United States* from October 2023 stated that “the United States lacks a comprehensive strategy to address the looming two nuclear-peer threat environment and lacks the force structure such a strategy will require.”²³ Nonetheless, as

¹⁷ Rebecca Davis Gibbons and Stephen Herzog, “Durable institution under fire? The NPT confronts emerging multipolarity,” *Contemporary Security Policy*, Vol. 43, No. 1, 2022, p. 71, available at <https://doi.org/10.1080/13523260.2021.1998294>.

¹⁸ Hans M. Kristensen and Matt Korda, “10. World nuclear forces,” in *SIPRI Yearbook 2022: Armaments, Disarmament and International Security* (Oxford: Oxford University Press, 2022).

¹⁹ Office of the Secretary of Defense, *Annual Report to Congress: Military and Security Developments Involving the People's Republic of China* (Washington, D.C., 2022), p. 98, available at <https://media.defense.gov/2022/Nov/29/2003122279/-1/-1/1/2022-MILITARY-AND-SECURITY-DEVELOPMENTS-INVOLVING-THE-PEOPLES-REPUBLIC-OF-CHINA.PDF>

²⁰ Brad Roberts, Michael Albertson, Paul Bernstein, Elaine Bunn, Brad Clark, Elbridge Colby, Jacek Durkalec, Jeff Edmonds, Kayse Jansen, C. Robert Kehler, Pat McKenna, Frank Miller, Brian Radzinsky, Robert Soofer, Sugio Takahashi, Michael Urena, John Warden, and Greg Weaver, *China's Emergence as a Second Nuclear Peer: Implications for U.S. Nuclear Deterrence Strategy* (Livermore: The Center for Global Security Research at Lawrence Livermore National Laboratory, Spring 2023), available at https://cgsr.llnl.gov/content/assets/docs/CGSR_Two_Peer_230314.pdf; Robert Litwak, “A Tripolar Nuclear World: Challenges to Strategic Stability,” *The Washington Quarterly*, Vol. 46, No. 4, 2023, pp. 143–158, available at <https://doi.org/10.1080/0163660X.2023.2286790>.

²¹ M. Taylor Fravel, Henrik Stålhane Hiim, and Magnus Langset Trøan, “China's Misunderstood Nuclear Expansion: How U.S. Strategy Is Fueling Beijing's Growing Arsenal,” *Foreign Affairs*, November 10, 2023, available at <https://www.foreignaffairs.com/china/chinas-misunderstood-nuclear-expansion>.

²² Matthew Costlow, Robert Peters, and Kyle Balzer, “A Misleading Metaphor: The Nuclear ‘Arms Race,’” *War on the Rocks*, November 20, 2023, available at <https://warontherocks.com/2023/11/a-misleading-metaphor-the-nuclear-arms-race/>.

²³ Madelyn R. Creedon, Marshall S. Billingslea, Rose E. Gottemoeller, Rebecca L. Heinrichs, Robert M. Scher, Franklin C. Miller, Jon L. Kyle, Gloria C. Duffy, Lisa E. Gordon-Hagerty, John E. Hyten, Matthew H. Kroenig, and Leonor A. Tomero,

mentioned in the introduction, former Acting Assistant Secretary of Defense for Space Policy, Dr. Vipin Narang, argues that the two-peer nuclear problem “understates the complexity of the challenge we face.” He speaks of a “multiple nuclear challenger problem because each adversary presents different challenges for U.S. strategists.”²⁴

Consequently, the global order is moving from a (partial) unipolar order regarding the global power distribution, which is bipolar on the level of nuclear deterrence, towards a multipolar order, that will become tripolar on the level of nuclear deterrence (see the Table below). The caveat here is that the emphasis lies on the main nuclear deterrence relationships on a global scale. During the Cold War, the main relationship was between the United States and the Soviet Union. After the Cold War, it was between the United States and Russia, the main successor state of the Soviet Union. The new nuclear order is then characterized by the emergence of nuclear tripolarity between the United States, Russia, and the People’s Republic of China. During the nuclear era, regional nuclear powers also emerged, such as the United Kingdom (1952), France, (1960), the People’s Republic of China (1964)—which is now in the process of becoming a nuclear peer to the United States and Russia—then reportedly Israel (1960s), India (1974), Pakistan (1998), and North Korea (2006). However, the transition seems to be going rough and is not without nuclear risks.

	1945-1990		1991-2010s		Late 2010s-...
Polarity	Heterogeneous Bipolarity	<i>Post-Cold War Interregnum</i>	Homogeneous Unipolarity	<i>Current Interregnum</i>	Heterogeneous (Partial) Unipolarity/ Bipolarity/ Multipolarity
Nuclear Polarity	Bipolarity		Bipolarity		Tripolarity

Table: the interregnums between nuclear orders.

A Disorderly Transition Period

While the post-Cold War interregnum was also not without risk, the interregnum was brief and the threats were clearly demarcated, namely the issues of horizontal nuclear proliferation and “loose nukes.” Immediately after the Cold War, there was a threat of horizontal nuclear proliferation to (and from) the successor states of the Soviet Union beyond Russia because Belarus, Kazakhstan, and Ukraine inherited parts of the Soviet nuclear arsenal that were located on their territories. Nevertheless, horizontal non-

America’s Strategic Posture: The Final Report of the Congressional Commission on the Strategic Posture of the United States (Washington, D.C.: Institute for Defense Analyses, 2023), p. vii, available at <https://armedservices.house.gov/sites/republicans.armedservices.house.gov/files/Strategic-Posture-Committee-Report-Final.pdf>.

²⁴ Vipin Narang and Heather Williams, “Nuclear Threats and the Role of Allies,” op. cit.

proliferation diplomacy was successful because all three states agreed to denuclearize.²⁵ Another risk was the issue of so-called loose nukes or the possibility that former Soviet nuclear weapons (but also materials, technologies, and human capital) could end up in the hands of non-state actors, such as terrorist groups and criminal organizations, or rogue states.²⁶

The present transition period is also not without risk. Moreover, compared to the immediate post-Cold War interregnum, the current interregnum seems to be lasting longer before the global nuclear order stabilizes at a new nuclear deterrence equilibrium. If we only look at systemic metrics or the distribution of capabilities, the world moves from (partial) unipolarity to multipolarity. If we only look at the numbers of major nuclear powers, the world moves from bipolarity to tripolarity. However, if we look at non-material factors—factors that classical realism finds important but that neorealists tend to discount²⁷—such as the importance of leadership, diplomacy, domestic politics, regime type and national character, and the motivations of fear, pride, and hubris, the transition from (partial) unipolarity and nuclear bipolarity towards multipolarity and nuclear tripolarity could thus be depicted as an unstable interregnum.

First, Nina Tannenwald argued in 2018 that the nuclear taboo, or the “consensus that nuclear weapons are so destructive and abhorrent that it would be unacceptable to use them,” is weakening.²⁸ While in January 2022, the five nuclear-weapon states issued a joint statement that affirmed the belief that “a nuclear war cannot be won and must never be fought,” the nuclear rhetoric and action by one of these five states—Russia—has undermined the credibility of this consensus.²⁹ The use of nuclear rhetoric by Russia against Ukraine and its partners for blackmail and coercion purposes has continued during the war.³⁰ Furthermore, Russia did not stop at issuing threatening nuclear rhetoric; actions and policies also changed. For instance, Russia forward deployed non-strategic nuclear weapons to Belarus.³¹

²⁵ Martin B. Kalinowski, “Nuclear Arms Races and Arms Control at the Beginning of the 21st Century,” *Security Dialogue*, Vol. 35, No. 2, 2004, pp. 217–225, available at <https://doi.org/10.1177/09670106040449>.

²⁶ André W. M. Gerrits, “Russia, the West, and the Loose Nukes Syndrome,” *International Relations*, Vol. 14, No. 6, 1999, pp. 23–39.

²⁷ Kirshner, *An Unwritten Future*, op. cit.

²⁸ Nina Tannenwald, “The Vanishing Nuclear Taboo? How Disarmament Fell Apart,” *Foreign Affairs*, October 15, 2018, available at <https://www.foreignaffairs.com/articles/world/2018-10-15/vanishing-nuclear-taboo>.

²⁹ The White House, “Joint Statement of the Leaders of the Five Nuclear-weapon States on Preventing Nuclear War and Avoiding Arms Races,” January 3, 2022, available at <https://www.whitehouse.gov/briefing-room/statements-releases/2022/01/03/p5-statement-on-preventing-nuclear-war-and-avoiding-arms-races/>.

³⁰ Horovitz and Stolze, “Nuclear rhetoric and escalation management in Russia’s war against Ukraine: A chronology,” *SWP Working Paper*, No. 2, 2023, pp. 1–257, available at https://www.swp-berlin.org/publications/products/arbeitspapiere/Horovitz_and_Stolze_-_Nuclear_Chrono_Final_2August2023.pdf.

³¹ Jack Detsch and Robbie Gramer, “Russia’s Nuclear Weapons Are Now in Belarus: The move sends a clear political message, but some experts downplay its military significance,” *Foreign Policy Magazine*, March 14, 2024, available at <https://foreignpolicy.com/2024/03/14/russia-nuclear-weapons-belarus-putin/>.

Second, the violation and demise of the nuclear arms control regimes, originating from the (post-) Cold War period, indicate the revisionist attitude of certain major powers. This demise can be exemplified by Russia's violation of the Intermediate-Range Nuclear Forces (INF) Treaty, and the subsequent U.S. withdrawal from the treaty after no diplomatic solution could be found.³² From 2019 onwards, the 2010 New Strategic Arms Reduction Treaty (New START) was the only bilateral nuclear arms control treaty left. The treaty was extended for five years in 2021. However, on 21 February 2023, Russia suspended its participation in New START and the United States considers it to be in open violation.³³

Third, the non-proliferation regime is also in crisis. Talks and negotiations at the NPT Review Conferences and Preparatory Committees are becoming harsher, resulting in the inability to agree on a final document. Alexander Mattelaer speaks of a "diplomatic battleground."³⁴ An anonymous author from the U.S. government's Senior Executive Service stated that "Even if the NPT continues to limp along, ever more toothless, the broader strategic nuclear-stability regime is increasingly rickety."³⁵ The Russian violation of the 1994 Budapest Memorandum, whereby Ukraine became a non-nuclear-weapon state and party to the NPT in exchange for security assurances from Russia, the United States, and the United Kingdom, undermined the credibility of major power security assurances to prevent nuclear proliferation.³⁶ North Korea is further developing its nuclear arsenal.³⁷ The United States, under the Trump Administration, withdrew from the Joint Comprehensive Plan of Action (JCPOA) or Iran nuclear deal in 2018. Subsequently, Iran is taking technological steps forward and getting closer to the bomb.³⁸ Russia also de-ratified the Comprehensive Test Ban Treaty (CTBT) in November 2023.³⁹ Even though Russia remains a signatory state to the

³² U.S. Department of State, *Adherence to and Compliance with Arms Control, Nonproliferation, and Disarmament Agreements and Commitments* (Washington, D.C., June 2020), p. 7, 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>; See also Amy F. Woolf, *Russian Compliance with the Intermediate Range Nuclear Forces (INF) Treaty: Background and Issues for Congress (R43832)* (Washington, D.C.: Congressional Research Service, 2019).

³³ Paul K. Kerr and Mary Beth D. Nikitin, *Arms Control and Nonproliferation: A Catalog of Treaties and Agreements (RL33865)* (Washington, D.C.: Congressional Research Service, 2023).

³⁴ Alexander Mattelaer, "Bleak prospects for nuclear disarmament," *Egmont Policy Brief*, No. 320, 2023, p. 2, available at https://www.egmontinstitute.be/app/uploads/2023/10/Alexander-Mattelaer_Policy_Brief_320_vFinal.pdf?type=pdf.

³⁵ Anonymous, "Slouching Towards a Nuclear Gomorrah," *Survival*, Vol. 65, No. 6, 2023/2024, p. 138, available at <https://doi.org/10.1080/00396338.2023.2285608>.

³⁶ Alexander K. Bollfrass and Stephen Herzog, "The War in Ukraine and Global Nuclear Order," *Survival*, Vol. 64, No. 4, 2022, pp. 7–32, available at <https://doi.org/10.1080/00396338.2022.2103255>.

³⁷ Hans M. Kristensen, Matt Korda, Eliana Johns, and Mackenzie Knight, "North Korean nuclear weapons, 2024," *Bulletin of the Atomic Scientists*, Vol. 80, No. 4, 2022, pp. 251–271, available at <https://doi.org/10.1080/00963402.2024.2365013>.

³⁸ Kelsey Davenport, "Iran's nuclear program is advancing. So too should negotiations," *Atlantic Council*, March 2, 2023, available at <https://www.atlanticcouncil.org/blogs/iransource/irans-nuclear-program-is-advancing-so-too-should-negotiations>; Kali Robinson, "What Is the Iran Nuclear Deal?," *Council on Foreign Relations*, October 27, 2023, available at <https://www.cfr.org/background/what-iran-nuclear-deal>.

³⁹ Camille Grand, "Another blow to arms control: Russia's 'de-ratification' of the nuclear test ban treaty," *European Council on Foreign Relations*, November 2, 2023, available at <https://ecfr.eu/article/another-blow-to-arms-control-russias-de-ratification-of-the-nuclear-test-ban-treaty/>.

CTBT, the de-ratification move can be seen as a first step towards the resumption of public nuclear testing, or at least creating the necessary room to maneuver.

Last, the path towards nuclear disarmament is becoming harder due to an increased reliance on nuclear weapons by major powers for security and deterrence (and in the case of Russia also for intimidation). Moreover, there is also an increase in international polarization on nuclear disarmament due to the adoption and ratification of the Treaty on the Prohibition of Nuclear Weapons (TPNW). The nuclear ban treaty was negotiated, adopted, and opened for signature in 2017. It entered into force on 22 February 2021, after the 50th instrument of ratification had been deposited.⁴⁰ Opponents of the nuclear ban treaty, such as Brad Roberts, point towards the disadvantages for democracies because democratic states are more prone to public pressure than autocracies, and the risk of undermining extended deterrence, which is foundational for the security of numerous democratic societies. Nevertheless, Roberts recognizes the need for a “substantive dialogue about nuclear deterrence and disarmament.”⁴¹

Conclusion

The current transition period can thus be described as an unstable interregnum that puts strategic stability between the major nuclear powers under pressure. The meeting on arms control between the United States and China on November 6, 2023 was a hopeful signal.⁴² Nevertheless, the lack of clarity by China about the reasons for the expansion of its nuclear arsenal; Beijing’s refusal to date to engage in any meaningful arms control discussions, the vastly different strategic goals and objectives of the two sides, and the antagonism and lack of trust between both major powers are likely to complicate negotiation of any new formal arms control agreements.

Furthermore, while the Soviet Union and later Russia did display some leadership regarding arms control and non-proliferation during the second half of the Cold War and shortly after, Russia’s current irresponsible nuclear behavior and imperial revanchism make it a particularly dangerous nuclear power. Some parallels can thus be drawn between the current unstable interregnum and the period at the beginning of the Cold War that was characterized by unchecked vertical and horizontal proliferation. Lastly, the European Union (EU)—consisting of a nuclear-weapon state, NATO allies, and vocal disarmament

⁴⁰ United Nations Office for Disarmament Affairs, “Treaty on the prohibition of nuclear weapons,” available at <https://disarmament.unoda.org/wmd/nuclear/tpnw>.

⁴¹ Brad Roberts, “Ban the Bomb? Or Bomb the Ban? Next Steps on the Ban Treaty,” *ELN Global Security Policy Brief*, March 2018, p. 8, available at <https://www.europeanleadershipnetwork.org/wp-content/uploads/2018/03/180322-Brad-Roberts-Ban-Treaty.pdf>.

⁴² Office of the Spokesperson, “Assistant Secretary Mallory Stewart’s Meeting with the People’s Republic of China’s (PRC) Ministry of Foreign Affairs Director-General of Arms Control Sun Xiaobo,” *U.S. Department of State*, November 7, 2023, available at <https://www.state.gov/assistant-secretary-mallory-stewarts-meeting-with-the-peoples-republic-of-chinas-prc-ministry-of-foreign-affairs-director-general-of-arms-control-sun-xiaobo/>.

supporters—also lacks the necessary unity to play a significant role in nuclear weapons issues.⁴³

As a result, the likely conditions to stabilize the emerging nuclear tripolar order are a rebalancing of the nuclear deterrence equilibrium between the major powers, similar to the establishment of mutually assured destruction between the two superpowers of the Cold War, and a generational turnover in the leadership of major powers. Henry A. Kissinger stated in 2010: “It is said that nature abhors a vacuum; so does the international system. Chaos, if it occurs, will sooner or later settle down into a new order. It is the task of statesmanship to try to bring about what must happen ultimately and save humanity untold suffering.”⁴⁴ Alas, it is hard to see at this moment when and where that statesmanship will come from with a United States that is increasingly fixated on the PRC’s power rise, a China that is rapidly expanding its nuclear arsenal and is opaque about its intentions, a belligerent and revanchist Russia, and a disunited EU.

In short, the global nuclear order is going through an unstable transitional period or interregnum. Subsequently, before a heterogeneous multipolar international order with tripolarity at the level of nuclear deterrence (with three nuclear peers: the United States, Russia, and China) emerges, and before the third nuclear age is fully underway, policymakers globally will need to navigate the current unstable interregnum with caution and awareness of the possible nuclear risks. The nuclear powers will thus need to be prudent to avoid unintended escalation in a context marked by crumbling guardrails. To achieve a more stable global nuclear order, two conditions must be met. First, a rebalancing of the nuclear deterrence equilibrium needs to occur between the three major nuclear powers. Second, because it is currently unclear where the necessary statesmanship will be found to stabilize the transition period in the global nuclear order, a generational change in the leadership of the major nuclear powers is likely to be required to safely manage the new nuclear age.

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⁴³ Michal Onderco and Clara Portela, “External drivers of EU differentiated cooperation: How change in the nuclear nonproliferation regime affects member states alignment,” *Contemporary Security Policy*, Vol. 44, No. 1, 2023, pp. 150–175, available at <https://doi.org/10.1080/13523260.2022.2146336>.

⁴⁴ Henry A. Kissinger, “Power Shifts,” *Survival*, Vol. 52, No. 6, 2010, p. 210, available at <https://doi.org/10.1080/00396338.2010.540792>.



INTERVIEWS

This section of the *Journal* brings an interview with Thomas Scheber, former Director of Strike Policy and Integration, Office of the Secretary of Defense, on the ability of the U.S. nuclear complex to produce a new nuclear weapon. The interview discusses National Institute for Public Policy's 2015 report, *Assessment of U.S. Readiness to Design, Develop and Produce Nuclear Warheads: Current Status and Some Remedial Steps* by Mr. Scheber and the late John Harvey. The interview also addresses continuities and changes within the nuclear enterprise since the publication. While the National Nuclear Security Administration now has workable plans to modernize the fabrication facilities, implementation is still years away, creating a concern given the deterioration of the national security environment in the past decade.

An Interview with Thomas Scheber, former Director of Strike Policy and Integration, Office of the Secretary of Defense

Q. Your and John Harvey's report Assessment of U.S. Readiness to Design, Develop and Produce Nuclear Warheads: Current Status and Some Remedial Steps was published by National Institute about a decade ago. In which areas have you seen most progress? Which areas remain as problematic as ever? Have any of the areas examined in the report gotten worse over the past decade?

A. Prior to answering the question, I would like to acknowledge my co-author and colleague John Harvey, who passed away last year. We brought different backgrounds and perspectives to the 2015 report, and that made the report a better and a more complete product.

We looked at U.S. ability to produce and develop nuclear warheads, which is a relatively narrow sliver of the total scope of the nuclear enterprise's role. There are two aspects of this important issue: 1) people, their skills and judgement; and 2) facilities that are ready for production.

Some of the tasks that the nuclear security enterprise is currently performing are important but do not contribute more immediately to the task we examined. An example can be work on nuclear fusion, or work on life extension programs (LEPs). LEPs do not exercise all the critical skills needed to design and develop a new nuclear warhead.

On the positive side, DOE/NNSA now has a workable plan to modernize the fabrication facilities (e.g. plutonium parts, uranium parts, and tritium production). However, for plutonium parts, the current plans are limited in planned capacity to the Congressional mandate of 80 plutonium pits per year (ppy). We have not made much progress in the actual implementation. Plans are a start, but they are not sufficient for resilience which requires standby readiness and capacity. We are still years away from the production facilities being in operation.



DOE/NNSA has made progress in completing the initial round of LEPs, including the W76 LEP, which was perhaps the most comprehensive LEP to date. However, it took 11 years to complete and was fraught with difficulties. The downside is that this LEP, and others, exercised only engineering and assessment skills, but not design and developments skills needed for new design.

Regrettably, we have gone another decade without any new nuclear warhead developments. This means we are not creating opportunities for the next generation of weapons designers and producers to challenge them and help them develop skills to assess warheads in the current stockpile and the judgement to develop new designs in the future.

Q. The United States is entering an extremely challenging geopolitical era, potentially needing to simultaneously deter two nuclear peers and a few lesser nuclear powers. Is our nuclear weapons infrastructure prepared to deal with this contingency? And if not, what steps should the government take to prepare it to be able to respond to the challenge?

A. Given the uncertainty, we cannot know what surprises lie ahead. What will our adversaries do? Russia, China and others have each had nuclear infrastructures that have operated continuously for the past three decades while the U.S. infrastructure has been largely inactive. What kind of arsenal will we need to deter and, if necessary, defeat them? That is why we need a flexible and resilient infrastructure—to be prepared to respond.

If a geopolitical challenge arises, or if there is a failure in our nuclear stockpile, it will be very difficult to respond to it in a timely manner. We have not produced a new nuclear warhead in about 40 years. We have had limited warhead development programs, e.g. the Reliable Replacement Warhead Program, to exercise nuclear warhead development and design skills, but there was varying political support for these programs and none was completed.

Currently, we have plans to recapitalize our nuclear infrastructure, but we are years away from those plans being fully implemented. We need a sense of urgency and sufficient resources provided to get these plans to completion. Congress seems to understand the need for resilience and appears to be more helpful now than in years past. For example, in the Stockpile Resilience Program, Congress has given the National Nuclear Laboratories an explicit authorization to explore new designs. The program should be maintained and expanded.

Q. In your experience, what has been the most significant obstacle to attaining a sufficient readiness to design, develop, and produce nuclear warheads?

A. In the past, there were three main obstacles to attaining a sufficient readiness to design, develop, and produce nuclear warheads: 1) the hope by many senior officials that the nuclear arsenal would continue to be reduced and the United States will not need to build new nuclear warheads, which has led the Department of Energy to always plan for modernized

nuclear facilities with insufficient capacity for the future; 2) the lack of consensus on the need for the infrastructure recapitalization, especially during the 1990s; and 3) confusion at the national nuclear laboratories regarding what it is that they were allowed to do (e.g. people thought they were not allowed to even think about new warhead designs and that doing so would break the law, which was not the case).

In the past 6-8 years, a consensus has emerged on the need to support these issues and viable recapitalization plans are in place; however it has taken quite a long time to get there.

Q. Are there any areas of concern identified in the 2015 report that the National Nuclear Security Administration (NNSA) has managed particularly well?

A. The good news is that we now have plans to recapitalize the key production facilities. Additionally, the NNSA deserves the credit for completing the W76 and other LEPs. While the Government Accountability Office wrote a scathing report on the W76 and B61 LEPs and argued that the programs have not even achieved all of their goals, it was a monumental cross-laboratory and plant effort. The changes made to the W76 warheads would almost certainly have required a confirmatory nuclear test during the testing era.

Q. In the age of polarization on many foreign policy and defense issues, what are some areas of a strong bipartisan consensus in this area and how does it translate to funding and programs? (Can be a consensus on good or bad issues).

A. Both the 2009 and 2023 Strategic Posture Commissions wrote consensus reports. Both commissions were bipartisan in composition and both highlighted the need to be able to develop new nuclear warhead designs and recapitalize facilities. The 2009 Commission was split on the issue of nuclear weapon testing, while the 2023 report did not discuss the issue at all. The two reports are similar in many respects and that should tell us that when both political parties invite experts to look into the facts regarding the nuclear infrastructure, the experts will come to agreement on substantive issues.

Q. We are entering a period of significant nuclear weapon modernization. What does it mean for the nuclear warhead complex?

A. The period of significant nuclear weapon modernization means that there are likely to be problems ahead. In the past, we have focused on LEPs, and as soon as they were done, the production facilities again were silenced. We have not exercised all new development skills and have not conducted a sufficient number of experiments to train designers to examine the edges of the nuclear design envelope.

The United States has not had serial production of nuclear warheads in over 35 years, and that means we should expect to have problems reestablishing any new production, as would be the case with any industry that was shut down and then tried to resume production. Even minor changes to well tested production capabilities can produce

unexpected problems (think for example the Boeing and its recent problems with 737 aircraft caused by flight control upgrades and production line changes). We should not expect that it will be easy to reestablish production lines for new types of warheads.

Q. What more must be done to ensure maintenance of the capabilities and skills of our people (i.e., the intellectual capital of our nuclear warhead designers and engineers) should a (future) president decide that the nation's security requires fielding of a new nuclear warhead or modification of an existing warhead to provide a new military capability?

Our recommendations from 10 years ago are still relevant today. The laboratories need to conduct more experiments. For example, the Dual-Axis Radiographic Hydrodynamic Test Facility in Los Alamos still does only about 4 experiments a year. We should be conducting about one hydrotest experiment a month to give warhead designers more opportunities to explore the edges of the design envelope. Also, we still conduct only one subcritical experiment a year at the Nevada Test Site.

We should be doing prototyping, including perhaps even flight testing. One important, but underappreciated, aspect of this work is the close integration needed between the NNSA and the Department of Defense teams. Without new design activity, the integration skills needed are not fully exercised. Such interactions would help develop skills necessary for developing military specifications for new weapon systems.

Q. What do you think about the Strategic Posture Commission's recommendations for the nuclear enterprise infrastructure?

I endorse all the findings of the 2023 Strategic Posture Commission regarding the nuclear infrastructure. The only criticism that I might make is that the recommendations in the commission report are rather general, and they are not prioritized (unlike in the 2009 Strategic Posture Commission Report). The other issue that I might note is that the potential need for nuclear testing was not mentioned at all in the 2023 report. But the 2023 report is excellent, and many of its findings point to a long-term bipartisan consensus that future administrations can build on to improve the responsiveness of the nuclear enterprise.



PROCEEDINGS

RUSSIA'S INVASION OF UKRAINE: THREE YEARS ON

The remarks below were delivered at a symposium on "Russia's Invasion of Ukraine: Three Years On" hosted by the National Institute for Public Policy on February 25, 2025. The symposium discussed the geopolitical consequences of Ukraine's potential defeat and the implications for NATO; Russia's political strategy and tactics; the role of nonprofit organizations in helping Ukraine; the anticipated impact of the Trump Administration's policies on continued U.S. support to Ukraine; and the prospect of a negotiated outcome to the conflict.

David J. Trachtenberg

David J. Trachtenberg is Vice President of the National Institute for Public Policy and former Deputy Under Secretary of Defense for Policy.

Yesterday marked the third anniversary of Russia's full-scale invasion of Ukraine. As I noted in my email invitation, although Russia retains control of Crimea and has taken control of territory in eastern Ukraine, initial Russian (and some Western) expectations that Ukraine would fall within a matter of days have proved profoundly wrong.

Despite Moscow's escalatory threats (including nuclear), its use of North Korean troops and Iranian drones on the battlefield, and military support from China, Ukrainian forces have demonstrated remarkable resilience in the face of massive Russian assaults.

While the provision of U.S. armaments and support from other NATO countries has been instrumental in blunting Russia's brutal and illegal aggression, the future of U.S. military aid and assistance to Ukraine as a result of the change in U.S. administrations is under debate and remains to be seen.

Much has happened recently that bears directly on U.S. policy regarding Ukraine. President Trump has spoken with Vladimir Putin and is seeking to end the conflict through negotiations. European states and Ukraine have expressed dismay at being left out of the initial consultations that took place in Saudi Arabia and have stated that no acceptable agreement can be concluded without Ukraine's participation. The tone of the dialogue between the United States, Ukraine, and Russia has shifted markedly, leading others to speculate about the enduring nature of America's security commitments. European states are considering how to support Kyiv should American military assistance be curtailed. And yesterday, on the third anniversary of Russia's full-scale aggression, the United States voted with Russia, North Korea, and Iran against a UN resolution condemning Russia for its invasion of Ukraine and supporting the return to Ukraine of territory captured by Russia.¹ In short, the political situation is exceedingly dynamic, to say the least.

¹ Karen DeYoung and John Hudson, "U.S. votes against U.N. resolution condemning Russia for Ukraine war," *The Washington Post*, February 24, 2025, available at <https://www.washingtonpost.com/national-security/2025/02/24/united-nations-ukraine-russia-trump/>.



Both Russia and Ukraine still appear miles apart on their conditions for ending the war. Although Ukraine has prevented Moscow from achieving its objective of completely eliminating Ukraine's independence, many Western analysts believe the longer the conflict continues, the harder it will be for Ukraine to regain lost territory. Russian forces today control roughly 20 percent of Ukraine. On Saturday night, Russia fired more than 260 drones at Ukraine, its most massive single day drone attack against Ukraine since the start of the war.²

Our discussion today will address the geopolitical consequences of Ukraine's potential defeat and the implications for NATO, as well as Russia's political strategy and tactics and the role of nonprofit organizations in helping Ukraine. America's allies and adversaries are watching closely what happens in Ukraine and weighing the impact of U.S. policy changes. Some NATO countries have suggested the deployment of national troops in Ukraine as part of security guarantees should any agreement be reached. Both Britain and France are said to be developing plans for a "reassurance force" of up to 30,000 troops that would guarantee Ukraine's security and seek to deter further Russian aggression.³

Where we are today is arguably the result of a U.S. policy toward Ukraine that can be characterized as one of creeping incrementalism. The United States has provided Ukraine with enough military assistance not to lose, but not enough to win. Incrementalism is never a strategy for victory. At best, it results in stalemate or frozen conflict, and at worst, it leads to defeat. It is understandable that Americans feel fatigued spending billions of dollars in support of an effort that has not produced a clear victory and want the Europeans to assume a greater burden for Europe's defense.

What happens now on the battlefield and at the negotiating table will provide lessons for the NATO alliance, for the credibility of U.S. security guarantees, for the willingness of adversaries—including China—to challenge U.S. and Western interests more forcefully, for Russia's international standing, and for the willingness of states that are not party to the conflict to cast their lots either with the United States and the West or with those who seek to overturn the existing world order at the West's expense. This is the backdrop for today's discussion.

² David Brennan, "Russia, Ukraine exchange major drone attacks on invasion anniversary," *ABC News*, February 24, 2025, available at <https://abcnews.go.com/International/russia-ukraine-exchange-major-drone-attacks-invasion-anniversary/story?id=119115860>.

³ See John Paul Rathbone, Ben Hall, and Henry Foy, "France and UK plan air power-backed 'reassurance force' in postwar Ukraine," *Financial Times*, February 19, 2025, available at <https://www.ft.com/content/6dc1a080-babf-445a-9409-f18a835eabdc>. Also see Jill Lawless, "European troops, US support are part of an emerging plan for Ukraine. But it faces many hurdles," *The Washington Post*, February 21, 2025, available at https://www.washingtonpost.com/world/2025/02/21/ukraine-europe-security-force-us-backstop-nato/8833ff96-f012-11ef-bd80-8f2ac5c75a8a_story.html; Tim Zadorozhnyy, "Up to 30,000 European troops reportedly could be deployed to monitor Ukraine ceasefire, Washington Post reports," *The Kyiv Independent*, February 24, 2025, available at <https://kyivindependent.com/up-to-30-000-european-troops-may-be-reportedly-deployed-to-monitor-ukraine-ceasefire/>.

Luke Coffey***Luke Coffey is Senior Fellow at Hudson Institute.***

Regarding Ukraine, we need to get back to basics. Ukraine is the victim of Russia's aggression. Ukraine matters to the United States, and we have to do a better job communicating why to the American people. So far, we have failed in that task. The American people want to support Ukraine, so we have an advantage that we do not have to convince them. Most of the help Congress has provided, almost 80 percent, is spent in the United States, supporting the U.S. economy and jobs.

Ukraine matters to the United States, because Europe matters. Europe has a large economy. Russian President Vladimir Putin-caused instability is costing U.S. jobs because of our exports to Europe.

Russia is an adversary, and the People's Republic of China is observing the West's collective reaction to Russia's full-scale invasion of Ukraine. The conflict has given us the opportunity to learn what works on the battlefield and discover gaps in our own industrial base at the time when Americans are not fighting. That is a precious advantage and an enormous opportunity. Ukrainians have been extremely forthcoming in terms of sharing the lessons learned.

Michaela Dodge***Michaela Dodge is Research Scholar at the National Institute for Public Policy.***

Thank you for the opportunity to speak on geopolitical consequences of Ukraine's potential defeat. It's been quite a week for Ukraine, and I am looking forward to this timely discussion. I am saying "looking forward," but news has not been great, and we are entering difficult times in alliance relations.

I wrote on this topic back in January to alert U.S. policymakers and the public to the interconnectedness of happenings in Ukraine to U.S. national interests. By the looks of it, the piece hasn't taken much within the administration.

Ukraine's defeat, or rather Russia's victory (somewhat loosely defined as whatever the Russians think is a victory), would seriously hamper U.S. extended deterrence and assurance, including in the Indo-Pacific. Since China has openly allied itself with Russia, strengthening deterrence in the Indo-Pacific lies in defeating Russia in Ukraine.

Should Ukraine lose, Russia's geopolitical center of gravity would move closer to Europe. So would hundreds of thousands battle-experienced soldiers. Russia would obtain additional resources in Ukraine to wage its campaign. It would create yet more space to continue its conflict against NATO members. The term hybrid warfare currently denoting Russia's hostile actions is rather conveniently used to obscure the necessity to counter them more seriously than we are currently doing.

What allies perceive as a lack of resolve to defeat an aggressor in Ukraine is already sending ripples of uncertainty and concern throughout the U.S. alliance system. To this audience, one does not have to spell out its importance or benefit to our security and prosperity. Regrettably, such an understanding is not widespread in today's America. This spells out a challenge that will outlive the current administration. We forgot that if we do not fight the aggressors abroad, they will attack us here—sooner or later. That is a daunting prospect for a mother of three young boys.

Among more immediate consequences of Ukraine's defeat would be massive immigration flows to Europe. Since February 2022, over 6.5 million people, mostly women and children, left Ukraine for Germany, Poland, or the Czech Republic. So far, they have been welcomed, even though their support is somewhat decreasing. But the refugee challenge would become much worse in the case of Ukraine's defeat, causing a strain on the social system in the near-term, when every single available Euro must go into Europe's armaments. Russia's disinformation is already trying to undermine governments that have so far strongly supported Ukraine.

No matter what happens in Ukraine, NATO members must increase their defense spending. Today's situation has exposed Europe's criminal negligence of its armed forces. There will be hell to pay for Europe if Ukraine loses against Russia. But even if it doesn't, NATO and Ukraine will need to arm to deter Russia's future aggression. Russia's defeat after the end of the Cold War bought us slightly less than two decades of peace in Europe. And back then Russia knew it was defeated.

Perhaps some of my colleagues are correct in saying that Russia, not even managing its campaign against Ukraine well, would not be a threat to NATO. I disagree in the long-term. Russia's war economy supported by China is going strong enough. If Ukraine loses, Russia will plunder all those resources President Trump is interested in. If the Russians expected the Ukrainians to welcome them, they certainly would not expect any NATO members to welcome them (perhaps with exception of Hungary and Slovakia). They would likely fight differently, and perhaps resort to battlefield nuclear weapons from the get go.

NATO is not prepared for such an eventuality.

Russia's invasion of Ukraine seems to have contributed to allies' doubts about whether staying without nuclear weapons is such a good idea after all. And I get it, the Budapest Memorandum was not a treaty, or a guarantee, and I suppose a lawyer could make the case that we have met all of our commitments under it. Nevertheless, the Ukrainians themselves are certainly regretting giving up nuclear weapons. The perception appears to be that America (and the UK) failed Ukraine. Today, fewer people are against U.S. nuclear weapons withdrawal in European countries that reportedly host them than prior to February 2022. Nuclear weapons have consistently high support among the South Korean public. And even in Japan, the leadership is quietly let it be known that the country could develop a nuclear weapon is less than six months.

Ukraine's defeat would be seen as a validation of the worst pro-authoritarian instincts within the West's polity. Think Hungary and Slovakia—but on crack. It would make Europe's cozying up to China yet worse, at the time when the United States is trying to build leverage

to counter its “pacing” challenge. Countering Russia would become more difficult. Building transatlantic relations would become more difficult. United we stand, divided we fall—and this is particularly true in today when our adversaries are gearing up for a large-scale conflict.

I wish this discussion was about what we do now that Ukraine has won. And I hope that such a discussion is in our future; the sooner, the better.

Thank you. I am looking forward to my colleagues’ remarks and to the discussion afterwards.

Marek Menkiszak

Marek Menkiszak is Head of the Russian Department at the Centre for Eastern Studies and a former faculty member of the Institute of International Relations at the University of Warsaw.

The ongoing negotiations between the United States, Russia, and Ukraine are not about peace from Russia’s perspective. The goal is subjugation of Ukraine within the reestablished Russia’s sphere of influence, the second is to create a security buffer zone in Central Europe and the third is to push U.S. influence, especially its military out of Europe.

Russia now increasingly thinks it can win by a combination of tactical victories on the battlefield and diplomacy. It plays hardball using soft language. Its goal is to get concessions without fundamentally changing its gains. Whoever is in a hurry must pay more, and the price for peace is Ukraine’s surrender.

Russia also hopes for a transatlantic rift, because that would make it easier to achieve the aforementioned goals. It wants to divide and rule Europe and set agenda for negotiations. We are at a juncture when it is easier to ascertain Russia’s goals than the Trump Administration’s goals.

Martin Kroupa

Martin Kroupa is Head of Regional Development at the Post Bellum Organization, a Czech educational nonprofit organization based in Prague that has been assisting Ukraine in its efforts.

My experience comes from a nonprofit background. I am a co-founder of a nonprofit Skupina D (Group D) that raises funding for drones for the Ukrainians Army.

Ukrainian society is not fatigued and still works a lot to support efforts to counter Russia. Russia is pushing and Ukraine is preparing for Russia’s next offensive. No one is seriously talking about a ceasefire with Russia; the Ukrainians still feel that the fight is over their

sovereignty. Those who are fighting in Ukraine do not want to stop, because they know it would condemn Ukraine to Russia's terror.

From the Central and Eastern European (CEE) countries' perspective, it appears that the United States is getting weaker and cannot sustain the world order that has been conducive to globalization. The question we are asking is "What do we do now?". In this environment, the European countries are thinking about reintroducing conscriptions and increasing their defense budgets. Our nonprofit has also seen larger contributions from the public to support Ukraine's military's needs.

Hopefully, the changes will lead to stronger Europe, but what about the United States? It appears it is not as strong.

The Ukrainians are also currently against elections in wartime, even though Vladimir Zelenskyy's support is relatively low (yet still higher than Ukraine's previous politicians at a similar juncture in their tenures). For elections to be possible, Ukraine will have to be in peace (not just a ceasefire). One challenge is that currently, people in the military are not eligible to run in elections, yet these are the folks that enjoy the largest degree of support within the Ukrainian society right now.



PROCEEDINGS

NEXT STEPS IN HOMELAND MISSILE DEFENSE

The remarks below were delivered at a symposium on “Next Steps in Homeland Missile Defense” hosted by the National Institute for Public Policy on March 25, 2025. The subject of this webinar is discussed in a recent National Institute Occasional Paper and subsequent Information Series by David Trachtenberg. These publications recommend actions both the Trump Administration and the Congress should take to improve U.S. homeland missile defenses. They also considered implications for NATO, the impact of improvements to U.S. missile defenses on the credibility of U.S. extended nuclear deterrence guarantees to allies, and lessons that can be learned from Israel’s experience with its own “Iron Dome” program.

David J. Trachtenberg

David J. Trachtenberg is Vice President of the National Institute for Public Policy and former Deputy Under Secretary of Defense for Policy.

As I noted in my email invitation, March 23 marked the 42nd anniversary of President Ronald Reagan’s speech to the nation announcing the Strategic Defense Initiative (SDI). The goal of SDI was to protect the nation from Soviet nuclear missile attack by harnessing defensive technology, including space-based elements, that would help make nuclear weapons “impotent and obsolete.”

Although the main goals of SDI were never realized, technology has significantly advanced over the past four decades, making a more robust homeland missile defense posture more practical and cost-effective. Accordingly, as one of his first actions, President Trump issued an Executive Order on “The Iron Dome for America” (now called “Golden Dome”), directing substantial improvements to defend the United States against missile attacks of any type, in any phase of flight, and from any location.¹

Missile threats to the homeland have grown and continue to grow in numbers, types, and sophistication. Consequently, it is no longer reasonable—if it ever was—to argue that allowing the U.S. homeland to remain vulnerable to peer or near-peer missile threats from adversaries is a good thing.

The notion that national vulnerability equates to international stability is a legacy of Cold War thinking that I argue should be relegated to the proverbial dust bin of history. Missile defenses enhance deterrence by complicating the attack plans of a potential aggressor and can limit damage in the event deterrence fails despite our best efforts and for whatever reason.

Now, some may see a more robust homeland defense posture as a move toward a “Fortress America” and the abandonment of U.S. security guarantees to long-standing allies. I would argue, however, that the more effective we are at defending our homeland, the more credible our security guarantees to others are likely to be. Therefore, U.S. allies should be

¹ The White House, Executive Order, “The Iron Dome for America,” January 27, 2025, available at <https://www.whitehouse.gov/presidential-actions/2025/01/the-iron-dome-for-america/>.



supportive of the Golden Dome concept, as the continued vulnerability of the U.S. homeland, in my view, is more likely than not to result in a folding of the American nuclear umbrella—to the detriment of allied security. How our European allies see this is something I hope we will consider today.

Moreover, in a world where both Moscow and Beijing—working independently or in concert—are threatening the United States and the West and brandishing nuclear threats, it is an urgent imperative to ensure that our citizens are defended not only against the prospect of direct attack, however improbable it may seem, but against coercive threats intended to prevent the United States from taking actions in its own security interest for fear of the potential consequences to our homeland.

In my National Institute *Occasional Paper*² and recent *Information Series*,³ links to which were provided in the email invitation to this event, I argue for building on President Trump's Executive Order by including adequate funding for homeland missile defenses in the president's budget submission to Congress. I also call on Congress to amend U.S. missile defense policy in the Fiscal Year 2026 National Defense Authorization Act by avoiding any language in law that explicitly or implicitly endorses exclusive reliance on strategic deterrence to defend the nation against strategic missile threats from nuclear peer adversaries.

Deterrence will always be part of U.S. strategy and should be, but foregoing active defense of the homeland against significant missile threats of all types from major adversaries is shortsighted and leaves the American people hostage to the presumed rationality of an opponent.

Perhaps most importantly, it is critical to acknowledge the importance of a space-based missile defense layer including both sensors and shooters that can counter offensive missiles in their early stages of flight, well before they approach U.S. territory, and to submit a budget request that appropriately funds development of kinetic and non-kinetic space-based defensive programs.

Although the United States has refrained from deploying a comprehensive space-based missile defense layer to protect the nation, the groundwork must be laid now to allow progress on kinetic and non-kinetic defensive means to move forward expeditiously. This includes space-based interceptors as well as directed energy systems that have utility against multiple types of offensive missiles.

Perhaps there are lessons that can be learned from Israel's Iron Beam experience, which, it has been argued, dramatically changes the cost effectiveness ratio in favor of the defense. More broadly, given the level of U.S.-Israeli cooperation in the area of missile defense, it has

² David J. Trachtenberg, *Next Steps in Homeland Missile Defense, Occasional Paper*, Vol. 5, No. 1 (Fairfax, VA: National Institute Press, January 2025), available at <https://nipp.org/papers/next-steps-in-homeland-missile-defense/>.

³ David J. Trachtenberg, *Defending America: The Next Steps in Homeland Missile Defense, Information Series No. 620* (Fairfax, VA: National Institute Press, March 17, 2025), available at https://nipp.org/information_series/david-j-trachtenberg-defending-america-the-next-steps-in-homeland-missile-defense-no-620-march-17-2025/.

even been suggested that perhaps the United States should deploy some Arrow interceptors as part of a layered U.S. missile defense system.⁴

In addition, I think it is imperative to overcome the bureaucratic and organizational impediments to progress on homeland missile defense. There are multiple entities with responsibility for missile defenses—from their development to fielding to operation.

The Missile Defense Agency, USNORTHCOM, USSTRATCOM, and the Services all play a role. But given the importance of space, I advocate for a greater role for the U.S. Space Force in homeland missile defense activities. This would be consistent with language in this year's NDAA calling for a single point of contact for designing and developing an integrated air and missile defense system for the United States.

Recently, several Space Force officials have highlighted the importance of the Space Force's missile defense mission, noting improvements in the Space Force's ability to track and target threats in space.

In this regard, I was disappointed to read last week that in the interest of government efficiency, the Space Force may be stripped of its missile defense component entirely—the argument being that there are already a multitude of entities involved in the missile defense mission.⁵ I think such a decision would be counterproductive and detrimental to implementing the president's Executive Order.

The president's Executive Order also directed the Secretary of Defense to report on an implementation plan within 60 days. That timeline expires in two days, and it remains to be seen how DoD will propose to implement a Golden Dome architecture that includes all of the elements identified in the president's directive.

There are a number of other recommendations in the report, but I won't take the time to highlight them here. Suffice it to say they include upgrading and modernizing terrestrial-based interceptor systems, deploying a third interceptor site in the United States, protecting critical infrastructures as part of a defensive "underlayer," and developing directed energy capabilities for missile defense. What we should seek to avoid is a disproportionate focus on the least effective options to the detriment of the most effective ones.

These recommendations, and others—such as considering deploying Aegis Ashore, for example—will no doubt be opposed by those who typically see any enhancements to homeland missile defense capabilities as unnecessary, destabilizing, impractical, unrealistic, and prohibitively costly—all Cold War arguments that no longer seem relevant or applicable in today's more threatening environment—if they ever were.

Finally, I would note that multiple administrations and multiple Secretaries of Defense have said that defense of the homeland is the nation's "top priority." Yet, the budget for

⁴ Fred Fleitz, "How President Trump Can Deploy a Missile Defense Shield to Defend America in Only Three Years," *American Greatness*, March 21, 2025, available at <https://amgreatness.com/2025/03/21/how-president-trump-can-deploy-a-missile-defense-shield-to-defend-america-in-only-three-years/>.

⁵ Courtney Kube and Gordon Lubold, "Trump admin considers giving up NATO command that has been exclusively American since Eisenhower," *NBC News*, March 18, 2025, available at <https://www.nbcnews.com/politics/national-security/trump-admin-considers-giving-nato-command-exclusively-american-eisenho-rcna196503>.

homeland missile defense is only a fraction of a fraction of what we spend on defense. This, I would argue, is unacceptable.

Michael Rühle

Michael Rühle is the former Head of the Climate and Energy Security Section in the Emerging Security Challenges Division at NATO Headquarters.

President Trump's decision to build a homeland missile defense has not yet received much attention in Europe. Unlike Ronald Reagan's famous television address of March 1983, President Trump's Executive Order from January 2025 was barely noticed.

This was because his Directive was only one in a barrage of similar Executive Orders that emanated from the White House. Another reason was that the war in Ukraine captured most of Europe's attention. So, rather than combing through Presidential Executive Orders, Europeans were busy discussing how President Trump's goal of brokering a peace agreement between Ukraine and Russia could actually be achieved.

It is therefore fair to expect that once Washington gets serious in implementing an *Iron* (or *Golden*) *Dome*, Europeans will be baffled, and will have few charitable things to say about this endeavor. This has little to do with strategic rationales, technologies or budgets, but all the more with the current political climate, which makes homeland defense appear like yet another strange idea by a strange U.S. administration.

Of course, the United States does not need Allied approval of its missile defense plans. After all, the U.S. did not get out of the ABM Treaty only to be told by its own Allies that large-scale missile defense for one's own homeland is something one should not even try.

However, assuming that the U.S. administration is still interested in maintaining a solid defense relationship with its European Allies, it should be in the United States' interest to understand European attitudes towards U.S. homeland defense, so as not to have this project become yet another irritant in an already strained relationship.

Three issues need our particular attention.

The first is the general European attitude vis-à-vis Theater Missile Defense. This attitude has changed for the better. The war in Ukraine, as well as the missile attacks against Israel by Iran, Hezbollah and Hamas, have demonstrated the tremendous importance of air- and missile defense in modern conflict. This positive experience has made Theater Missile Defense a legitimate part of many nations' military toolkit.

However, this analytic "rehabilitation" of missile defense in Europe is closely tied to the European theater. This suggests that a U.S. homeland defense will not be seen in Europe merely as an evolutionary extension of current trends in Theater Missile Defense, but as something radically different. In other words, the positive connotation of Theater Missile Defense in Europe will not necessarily translate into a blanket endorsement of U.S. homeland defense plans.

The second factor that will influence European reactions is the U.S. rationale for homeland defense. David's paper explains why the United States did not undertake a major effort at a nationwide missile defense, but it also explains why the rise of revisionist powers, and the advent of new technologies, has sparked a renewed attempt to move missile defense to center stage.

Europeans will hardly argue with the United States' threat perception *per se*. Russia is currently waging a war in Europe, and China's nuclear buildup has not gone unnoticed, either.

However, if the past is any guide, many Europeans will doubt whether a comprehensive missile defense is the answer to the problem—even more so as it is not yet clear how comprehensive the *Golden Dome* is ultimately going to be.

Many will argue that nuclear deterrence between the major powers still works, and that the scenarios underlying the quest for homeland defense, such as "coercive strikes," remain far-fetched. Regarding technology, critics will argue that previous claims by BMD advocates about the feasibility and effectiveness of missile defense were vastly exaggerated, and that a homeland defense against nuclear missiles was still out of reach.

How much traction these arguments ultimately will have is impossible to say. After all, Europe has not discussed strategic missile defense in earnest since the 1980s. Hence, should a new debate occur, many participants will seek to employ the 1980s arguments they still may be familiar with.

SDI does indeed offer some interesting parallels with today's debate. One of the factors that haunted SDI from its very beginning was its unclear rationale with respect to nuclear deterrence and extended deterrence. President Reagan sold it as an initiative to overcome a nuclear deterrence system that he considered immoral. This happened right at the time when Europeans were deploying nuclear Pershings and cruise missiles in Europe.

By contrast, many of Reagan's aides knew full well that the United States would have to continue to bank on nuclear deterrence for a long time to come. Hence, they emphasized the role of missile defense as a mere augmentation of deterrence. They specifically addressed European worries regarding missile defense and extended deterrence. A better protected United States, so the argument went, would make extended deterrence more credible. This helped dispel European fears that the United States would become isolationist and retreat from its international commitments under its "astrodome" shield. Equally importantly, SDI's character as a research program allowed Washington to conclude technical cooperation agreements with several allies, thereby lending additional legitimacy to it—whereas the *Golden Dome*, according to President Trump, "will be made all in the USA."⁶

Would the United States be able to address such European worries as effectively today as it did in the 1980s? Would it even want to? Answering this question brings us to the third and final factor that needs to be considered: the broader political context of U.S. BMD.

⁶ Fact Sheet: President Donald J. Trump Directs the Building of the Iron Dome Missile Defense Shield for America, The White House, January 27, 2025, available at <https://www.whitehouse.gov/fact-sheets/2025/01/fact-sheet-president-donald-j-trump-directs-the-building-of-the-iron-dome-missile-defense-shield-for-america/>.

The first Trump Administration had used threats and warnings about a U.S. withdrawal from Europe to push the Allies to increase their defense budgets. This approach worked, because the Europeans understood that U.S. qualms about unfair burden-sharing were legitimate.

By contrast, the second Trump Administration has chosen a much more confrontational path. It no longer seems satisfied with re-balancing the transatlantic security relationship, but questions its very utility. This dismissive attitude vis-à-vis Europe, which has also become visible in the Administration's dealings with Ukraine, has now led to a widespread counter-reaction, including an attempt to "de-risk" from the United States, for example by the European Union taking on a much stronger role in defense procurement, or by an increasingly alarmist discussion of the risks involved in buying U.S. "black box" systems like the F-35.

This is historically unprecedented. And yet, it is the backdrop against which Europeans will have to grapple with a U.S. missile defense project that is likened to the "Manhattan Project," and whose name alone invokes associations with President Trump's golden sneakers franchise.

The BMD narrative will thus be absolutely crucial. The *Iron Dome* Executive Order contains a detailed paragraph about cooperating with Allies on Theater Missile Defense.⁷ This suggests continuity. What is completely missing, however, is a conceptual link to extended deterrence. Indeed, the term "deterrence" is not even mentioned in the Executive Order. This could easily be fixed by administration officials making public statements to this effect. But whether the president would want them to do so is an open question. A recent ad by Lockheed-Martin describes *Golden Dome* as "an impenetrable shield," revealing a degree of hyperbole that goes way beyond what such a system can achieve. However, it appears perfectly tuned to the President's personal style.

So, my conclusion is clear: If U.S. missile defense is not to become yet another irritant in an already strained transatlantic relationship, the U.S. BMD narrative needs to be carefully calibrated. You may also say that it needs to be "de-Trumped." This is not just to calm down nervous Europeans. It should also be in the United States' own interest, if homeland missile defense is to be mainstreamed into its force posture for good. If *Golden Dome* is too closely associated with a specific president, it will suffer the same fate as SDI: It will lose momentum once that president leaves the White House.

⁷ "... The United States continues to cooperate on missile defense with its allies and partners to aid in the defense of ally populations and troops and of forward-deployed United States troops. Following the submission to the President of the next-generation missile defense reference architecture under section 3(a) of this order, the Secretary of Defense shall direct a review of theater missile defense posture and initiatives to identify ways in which the United States and its allies and partners can:

- (a) Increase bilateral and multilateral cooperation on missile defense technology development, capabilities, and operations;
- (b) Improve theater missile defenses of forward-deployed United States troops and allied territories, troops, and populations; and
- (c) Increase and accelerate the provision of United States missile defense capabilities to allies and partners." The Iron Dome for America, The White House, January 27, 2025, Section 5, available <https://www.whitehouse.gov/presidential-actions/2025/01/the-iron-dome-for-america/>.

Robert G. Joseph

Robert G. Joseph is Senior Scholar at the National Institute for Public Policy. Previously, he served as Under Secretary of State for Arms Control and International Security and as Special Assistant to the President and Senior Director for Proliferation Strategy, Counterproliferation and Homeland Defense.

Thank you, David. My compliments to you, Michael and Uzi for your thoughtful and insightful presentations. I'm sure like everyone listening this afternoon—learned a great deal from your comments.

I would like to make three points to broaden the context for our discussion.

First, like others who have long advocated for an effective missile defense of the American homeland, I was very encouraged by President Trump's Executive Order on "The Iron Dome for America."

The author or authors of the Order were clearly knowledgeable about the threats we face, about the state of technology to develop and deploy an effective defense against all types of missiles from all potential attackers, and about the more than 40-year history of, I would say, mostly failed efforts to achieve Ronald Reagan's original goal.

Perhaps most encouraging, the Order envisions the acceleration of space-based sensors and—I would say even more important—the development and the deployment of space-based interceptors capable of boost-phase intercept.

We may see in the next few days if the Secretary of Defense plan called for in the Order responds meaningfully to that part of the tasking or if, once again, the antibodies in the Pentagon prevail as they have most often done.

My direct experience was in the Bush-41 and Bush-43 Administrations. In both cases, homeland missile defense was a priority. In 41, this included Global Protection Against Limited Strikes (GPALS)—the program of record—to provide for what the Order now calls for. In 43, after exiting the ABM Treaty, we began the deployment of the Ground-based Missile Defense (GMD) system and put in place a set of advanced programs to keep pace with the rogue threats but that could possibly have been expanded to the near-peer threat from China. Unfortunately, with both 41 and 43, the follow-on administrations killed the programs.

The first Trump Administration also saw the president call for an effective space-based missile defense. Again, unfortunately, the concept was relegated to a study by his own Pentagon. We will see if it is different this time.

Second, I believe the study will say very positive things about the potential of space in general perhaps because the authors know that is what the president wants to hear. It is also likely that space sensors will be pursued aggressively. But, as for space-based interceptors—the essential key to success—I am not overly or even cautiously optimistic that the plan will call for near term deployment. I hope I am wrong, but my guess is that the plan will lay out

in strong terms a vision of space-based interceptors for the indefinite future—but not for now. As we all know, strong words and more studies do not translate into capabilities—as we have seen multiple times.

To be clear, unless the plan calls for moving forward now with the actual development and deployment of space-based interceptors—interceptors that are essential for defending against—and therefore deterring not full-scale strikes but rather Russian and Chinese coercive threats—the plan will fail, and the president’s goal will not be achieved.

My third and final point is that the problem—the fundamental flaw in the approach being taken—is that the Pentagon is being tasked to produce the plan without the direct involvement and oversight of the White House—as was the case in the first Trump Administration.

As far as I know, there is no one in the White House who is responsible for ensuring that the Pentagon comes up with the right answer. And most often, left to its own devices, DoD will do what DoD has done in the past—citing technology and funding concerns even when they no longer apply. Here, I hope that institutional fidelity to the land-based next generation interceptor is not allowed to derail the president’s call for an effective space-based defense.

The key to success in ending the ABM Treaty and deploying the first strategic missile defense system was direct and constant White House oversight. That same involvement is needed today to succeed.



LITERATURE REVIEW

Robert M. Soofer, et al., *“First we will defend the homeland”: The case for homeland missile defense* (Washington, DC: Atlantic Council, 2024), 119 pp.¹

President Trump’s January 27, 2025 Executive Order on “The Iron Dome for America,” has sparked yet another debate within the national security community over whether a more robust nationwide missile defense program makes strategic sense, is technologically feasible, and is worth the cost, especially in light of other pressing strategic and conventional force modernization priorities. This debate is decades old, and very few new arguments have been introduced since President Ronald Reagan announced his Strategic Defense Initiative (SDI) in March 1983. Yet, despite the advent of advanced technologies and the dynamism and fragility of the current international strategic environment, critics who view any effort to protect the nation against the potential breakdown of deterrence as unworthy of pursuit continue to propagate the same tired arguments against a more effective homeland missile defense. This is further proof that—at least in Washington—bad ideas never die.

The Atlantic Council’s report titled, *“First we will defend the homeland”: The case for homeland missile defense*, effectively refutes the critics’ arguments by providing a detailed and thorough analysis of the benefits of improving U.S. missile defenses. The report is comprehensive, logically organized, and well documented. The title is taken directly from a quote on the first page of the *2022 National Defense Strategy of the United States*, which acknowledges the growing threat of adversary offensive missile programs. Yet, as the authors note, “The nation falls short in fully protecting against an ever-growing number, diversity, and sophistication of long-range missile threats. This does not make sense.”

The report begins by assessing these growing missile threats from both rogue states and peer and near-peer nuclear adversaries, noting that along with deterring the likes of North Korea, the United States “must now simultaneously deter two nuclear-armed great powers—Russia and China.” It argues persuasively that failing to address these threats “could significantly narrow US decision-making and curtail a president’s freedom of action during crisis and conflict.” It notes that improving homeland missile defenses strengthens deterrence by complicating the attack calculus of any potential aggressor and reduces the efficacy of coercive nuclear threats. Further, it argues that advances in technology make it possible to significantly augment existing homeland missile defenses over the next five years. The report concludes that “the missile threat to the homeland is real and growing and, if left unaddressed, could seriously undermine US grand strategy and the very basis of national defense strategy.” This is a sobering conclusion that should be taken serious by U.S. decision makers.

So what do the authors recommend the United States do to address the issues they cite? Their principal recommendation is to “update US homeland missile defense policy to remove the false distinction between rogue-state and major power missile threats and to eliminate

¹ The report can be found at <https://www.atlanticcouncil.org/wp-content/uploads/2025/02/First-We-Will-Defend-the-Homeland-2024-FINAL-1.pdf>.



sole reliance on nuclear retaliation to deter Russian and Chinese limited coercive missile attacks against the homeland.” This recommendation makes eminent sense and is consistent with other reports and studies that have assessed this issue, including the October 2023 report of the bipartisan, congressionally mandated Strategic Posture Commission and this author’s January 2025 National Institute *Occasional Paper*.² Moreover, the report argues for defending against all types of offensive missiles, including cruise and hypersonic missiles; improving the survivability of U.S. strategic nuclear forces and their associated command and control nodes; protecting critical U.S. infrastructure against major power cruise missile threats; and developing “next-generation missile defense capabilities,” including space-based kinetic and non-kinetic technologies.

The authors clearly and effectively address the critics’ persistent yet erroneous arguments that enhancing U.S. homeland missile defenses will be destabilizing, spark an arms race, and cost too much. They explain the political and ideological fault lines in the contemporary debate over the value of homeland missile defense. They note that the primary purpose of missile defense is to bolster deterrence and to provide a degree of protection for the nation should deterrence fail. They also point out that defense of the homeland contributes to the credibility of U.S. extended deterrence and assurance, noting that “Allies must understand that US homeland missile defense makes Washington more likely—not less—to come to their aid and increases—rather than jeopardizes—strategic deterrence across the alliance.” As the eminent strategist Herman Kahn noted, it is not credible for the United States to threaten nuclear war on behalf of an ally if the American homeland is left vulnerable to an aggressor’s strikes.

The report analyzes Russian and Chinese nuclear doctrines, including the prospects of limited nuclear use and their capabilities for limited nuclear employment against the U.S. homeland. It notes that both Russia and China “are developing capabilities and doctrine to strike the US homeland during regional conflict to prevent US support of allies.”

The report discusses the evolution of U.S. missile defense policy after the Cold War, including the respective roles of both the executive and legislative branches of government in establishing policy direction. Importantly, it notes that missile defense and deterrence are “complementary,” and that the United States must not only improve the survivability of its own nuclear deterrent forces but “must be ready to fight two major nuclear adversaries sequentially” in order to deter the prospect of opportunistic aggression.

Finally, the report discusses the architectural challenges of developing a defense system against multiple types of missile threats and proposes a layered missile defense architecture for the homeland, including advocating for a preferential defense of priority assets to improve system effectiveness and efficiency. The report’s recommendations to improve the overall homeland defense architecture, to include space-based defensive elements, are well reasoned and clearly articulated.

² David J. Trachtenberg, *Next Steps in Homeland Missile Defense, Occasional Paper*, Vol. 5, No. 1 (Fairfax, VA: National Institute Press, January 2025), available at <https://nipp.org/papers/next-steps-in-homeland-missile-defense/>.

The authors of this report have produced a document that comprehensively addresses the complexities of the missile defense debate, explains the strategic benefits of homeland missile defense and refutes the mistaken assertions of critics who rely on outdated Cold War thinking that is no longer applicable to today's international environment. In this regard, they have done a tremendous public service. This report should be read and studied by all those who believe that protection of America's homeland should be the nation's top priority.

*Reviewed by David J. Trachtenberg
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James H. Anderson and Daniel R. Green (eds.), *Confronting China: US Defense Policy in an Era of Great Power Competition* (New York, NY: Bloomsbury Academic, 2024), 384 pp.

Confronting China: US Defense Policy in an Era of Great Power Competition provides an excellent introduction to and an overview of U.S. policy toward the People's Republic of China (PRC). Distinguished contributors with decades of government experience analyze many important facets of the U.S.-PRC strategic competition and discuss what China's dramatic rise means for U.S. defense policy and strategy.

The authors' contributions can be divided into two areas: regional and functional. The regional chapters discuss U.S. alliances, including in the Indo-Pacific, Europe, the Middle East, and Africa. Each of these regions can play a supporting role in helping the United States outperform China in the rivalry. Just as importantly, the authors remind readers that these regions will not make equal contributions to the U.S. ability to prevail over China in the long-term. That knowledge should inform U.S. resource allocation. The authors also emphasize the need to foster alliance relationships and to counter China's subversive designs in the so called "gray zone," particularly against democracies.

The functional contributions discuss nuclear deterrence and China's emergence as a nuclear peer competitor, the importance of space, cyber challenges, the need to rebuild the U.S. defense industrial base, the implications for deterrence of a growing Sino-Russian entente, and the need to articulate a winning strategy to prevail in the rivalry. Excellence in a single line of effort will not be enough to prevail over the long run; the United States will have to improve its defense policy across the board.

Overall, the picture is not encouraging from the U.S. perspective. China is intent on building a "world-class military" by 2049, including significantly expanding its nuclear, conventional, and unconventional forces. The Chinese leadership considers these military capabilities key enablers in a broader political effort to influence domestic and international opinion in China's favor. The latter effort includes leveraging social media, radio, television, and investments in education as influence tools aimed at securing China's advantage without the necessity to fight.

China's vulnerabilities include its dependence on energy imports potentially at risk of disruptions. China's aging population may make it more difficult to sustain economic growth, the cornerstone of the Chinese Communist Party's legitimacy, and force levels. The examination of different facets of the U.S.-China rivalry makes clear that military power is only a necessary, but not sufficient, condition to prevail, particularly over the long-term. While war is not inevitable, it is worthwhile to keep in mind that most great power rivalries end in bloodshed, as Anderson points out. A chapter discussing economic issues is a glaring omission in the structure of this otherwise compelling edited volume.

The United States faces a strategic imperative of putting in place forces that credibly deter China and assure allies. The authors remind us that the U.S.-China rivalry is likely to last for decades to come. Sustaining the U.S. public's attention and support for the necessary policies and alliance relationships over such a long period of time will require an uncommon degree of capable communication on the government's part, particularly considering that the level of defense spending has been unequal to the task for over a decade.

Getting U.S. China policy right will be difficult. The requirement to "address short-term needs without losing sight of the long term," depart from the "business-as-usual" approach, weighing trade-offs, managing risks, and enabling and supporting leaders as they make hard choices seems daunting. Yet, making these choices now, while the United States still possesses advantages in important areas of the rivalry is necessary to avoid having to make even more difficult choices under much less favorable conditions, including a potential war with China.

This edited volume is a good starting point for those seeking to put U.S. China defense policy and strategy on a better track, and those who are looking to improve their understanding of current defense issues shaping this important debate in the United States.

*Reviewed by Michaela Dodge
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Sergey Radchenko, *To Run the World: The Kremlin's Cold War Bid for Global Power* (New York: Cambridge University Press, 2024), 768 pages.

The Soviet Union has always been difficult for outsiders to decipher. Winston Churchill famously described it as "a riddle wrapped in a mystery inside an enigma." Soviet archives have proven to be an on-again, off-again resource for historians, but the overall historical record is far from complete. What then, would possess a serious historian to write a major work on one of the most difficult to understand countries, the Soviet Union, during a time period, the Cold War, in which reliable sources are spotty at best?

Sergey Radchenko, a professor at the Johns Hopkins School of Advanced International Studies campus in Bologna, wrote *To Run the World* to answer the major question: what motivated Soviet leaders to act the way they did in their foreign policy? Radchenko wisely framed his study around this question so the book did not expand into other well-trodden

academic ground, such as general Cold War history, U.S.-Soviet relations, or other similar subjects. Instead, by staying focused on the motivations for Soviet foreign policy decision-making, as illustrated by multiple events and surveys contained in the chronologically-arranged chapters, Radchenko advances his argument succinctly and convincingly even for a lengthy book.

Radchenko's argument, in short, is that Soviet leaders constantly sought recognition, and thus, legitimacy, by foreign powers, primarily the United States and the People's Republic of China, but also other members of the Warsaw Pact and various third world states. Soviet leaders sought to achieve this recognition as a superpower and leader of the worldwide revolution by being both a partner and an adversary—in either case, the goals were the same: advance national interests (in large part through military power) and be perceived as powerful and due deference. Radchenko is well aware that the Soviet urge to present itself as both a powerful partner and adversary, often at the same time, appears self-contradictory. Indeed, Soviet foreign policy throughout the Cold War often evinced these contradictory goals and actions, whether it be Stalin's selective commitment to the Yalta agreements or Soviet agreement to arms control negotiations while at the same time pursuing military superiority.

This reviewer was initially modestly skeptical of the explanatory power of the Soviet search for legitimacy, believing there is more evidence for the drive for geopolitical security through expansion that motivated Soviet foreign policy—but Radchenko presents a convincing picture with copious evidence that classic Soviet foreign expansionism was often tempered, or at least modified, by a desire to shape the external perceptions of Soviet allies and adversaries. With the caveat that the historical record is far from complete, a caveat Radchenko is always careful to acknowledge, there is sufficient evidence from private Soviet meeting minutes, memoirs, and other sources, to conclude that Soviet leaders, even though they had unique proclivities and focus areas, generally placed great importance on how they were perceived by other states—even if it occasionally meant a relatively less desirable security outcome.

Radchenko structures *To Run the World* chronologically, from Stalin to Gorbachev, but each chapter often features a global focus. He has written previously on the Sino-Soviet relationship during the Cold War, and that scholarship shows through in the especially enlightening discussions about how Soviet leaders often found themselves competing with Chinese leaders for the spotlight within the Communist sphere—a competition that often affected how the Soviets approached relations with the United States or other Asian powers. Soviet interventions in the third world during the Cold War often provided additional glimpses into how and why Soviet leaders made the foreign policy decisions they did. So, while Western readers may think Soviet actions in the Middle East were relatively less consequential for the United States and Europe, there is still great historical value in recounting these events and how they demonstrated a certain continuity in Soviet foreign policy.

Radchenko is a careful, thorough historian of the Soviet Union as evidenced by *To Run the World's* 100 pages of citations and explanatory notes. He demonstrates an excellent

handle on sources from multiple countries and, just as importantly, he presents fair descriptions of ongoing academic debates on those issues where there is not enough evidence or where the evidence is mixed. Radchenko is often content to present both sides of a debate and then point the reader to the best sources should they wish to explore the topic further. Moreover, he helpfully points out when new historical evidence has come to light, such as the slow drip of declassified documents that Russia releases from the Soviet archives from time to time—some of which he has documented in other publications on more specialized topics.³

Overall, students of the Cold War, and Soviet foreign policy in particular, would do well to read *To Run the World*, especially for Radchenko's framework centered around the Soviet pursuit of external validation. Specialists on the Cuban Missile Crisis, arms control negotiations, or other events may quibble with Radchenko on the applicability and explanatory power of the Soviet quest for recognition in some instances, but the book's overall argument is generally persuasive. Radchenko summarizes his point nicely when he concludes, "Throughout the Cold War, the Soviets tried hard to undermine Western unity even as they craved Western recognition. They never managed." (p. 602)

Readers who are conversant in current Russian affairs will find great value in this history of the Cold War period—the driving factors for Russian foreign policy today have clear predecessors in the Soviet past. Alas, until there is a greater opening of Soviet historical records accessible to the outside world, the Soviet Union will remain profoundly mysterious. And yet, as books like *To Run the World* remind us, the evidence we do have continues to be of great historical and current value.

Reviewed by Matthew R. Costlow
National Institute for Public Policy

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³ Sergey Radchenko and Vladislav Zubok, "Blundering on the Brink: The Secret History and Unlearned Lessons of the Cuban Missile Crisis," *Foreign Affairs*, Vol. 102, No. 3 (May/June 2024), pp. 44-63.



DOCUMENTATION

This issue's Documentation section touches on key national security developments. It brings select excerpts from the Statements of General Anthony Cotton, Commander, United States Strategic Command, and General Stephen N. Whiting, Commander, United States Space Command, before the Senate Armed Services Committee, Subcommittee on Strategic Forces. Each general discussed concerning threat developments, particularly regarding Russia and China, and the respective commands' steps to respond to the challenge. The Documentation section also provides a full-length transcript of NATO Secretary General Mark Rutte's introductory remarks to U.S. Vice President JD Vance's much discussed remarks, which the *Journal* also reprints in full. Lastly, the Documentation section contains excerpts from the Estonian Foreign Intelligence Service's annual report on international security.

Document No. 1. Statement of General Anthony Cotton, Commander, United States Strategic Command before the Senate Armed Services Committee, Subcommittee on Strategic Forces, March 26, 2025, select excerpts.

[...] Nuclear weapons and the nuclear mission underpin all of our national defense priorities. The United States will maintain flexible nuclear capabilities and tailored deterrence strategies for potential adversaries that reflect our best understanding of their decision-making and perceptions to effectively deter across a spectrum of adversaries, threats, and conflicts. [...]

I continue to emphasize that Cold War strategies are insufficient in today's complex environment. The character of warfare continues to evolve; gray zone tactics, advanced technologies, growing adversary transactional relationships, and economic entanglement between nation-states complicates our decision calculus in ways never imagined during the Cold War. [...]

China

The CCP's nuclear modernization efforts continued throughout 2024. General Secretary Xi Jinping's directive that China be prepared to seize Taiwan by 2027 has driven CCP investment in the expansion of its land-, sea-, and air-based nuclear delivery platforms and the infrastructure necessary to support a major build-up of its nuclear forces. This expansion is complemented by an increasing capacity to create plutonium from fast breeder reactors with Russian support. Despite claiming technologies for these reactors and reprocessing facilities are intended for peaceful purposes, China likely aims to produce plutonium for its weapons program.

Beijing probably continues to load new solid-propellant intercontinental ballistic missiles (ICBMs) into the silo fields that I first reported to you in January 2023. These fields consist of 320 silos across Western China. China has surpassed 600 deliverable nuclear warheads and is forecasted to have over 1,000 nuclear warheads by 2030, many of which will deploy



in higher readiness levels. This force is expected to grow through 2035 in line with the People's Liberation Army (PLA) modernization goal of becoming a "world class" military by 2049.

The PLA Navy's six operational JIN-class ballistic missile submarines (SSBNs) represent China's first credible sea-based nuclear deterrent. Each JIN-class SSBN carries up to 12 missiles, and China's next-generation TYPE 096 SSBN will reportedly be armed with longer range sea-launched ballistic missiles (SLBMs). Based on the projected 30-plus-year service life of the platforms, China will operate its JIN and TYPE 096 SSBN fleets into the 2050s.

China's H-6N bomber is capable of carrying air-launched ballistic missiles armed with nuclear warheads; last year, Beijing used H-6Ns for the first time during its ninth combined bomber patrol with Russia. China is also developing a strategic stealth bomber, the H-20, believed to have a range of 5,000 miles and the capability to threaten the continental United States.

Russia

Russia maintains the largest and most diverse nuclear arsenal in the world—including 1,550 deployed strategic nuclear warheads and up to 2,000 non-strategic nuclear warheads. Russia's non-strategic nuclear warheads are unconstrained by any treaty obligation, and its refusal to negotiate a follow-on to the treaty between the United States of America and the Russian Federation on Measures for the Further Reduction and Limitation of Strategic Offensive Arms (New START) means its strategic warheads will be unconstrained after the treaty expires in February 2026.

Russia's ICBM force is comprised of 310 missiles capable of carrying up to 1,200 warheads. Despite recent testing challenges with the RS-28 Sarmat ICBM, Moscow continues to pursue this new ICBM, which has a range of 11,000 miles, the ability to carry multiple nuclear warheads, and a future fractional orbital bombardment capability. Russia's Skyfall nuclear powered strategic cruise missile remains in testing and has not yet been formally certified for combat.

The sea-based leg of Russia's triad is comprised of at least 10 DELTA and BOREI-class SSBNs equipped with up to 16 SLBMs each, and the fleet is capable of carrying more than 700 warheads. The Russian Strategic Navy continues to modernize by adding new BOREI-class submarines and deploying new SS-N-32 SLBMs. Russia is also developing the submarine-deployable Poseidon autonomous underwater vehicle, which may be armed with a two-megaton nuclear payload. Lastly, Russia's multi-mission Severodvinsk SSGNs are armed with long-range KALIBR cruise missiles designed to destroy enemy ships and land-based targets.

Russia's air-leg has up to 70 strategic bombers—comprised of the Tu-95MS Bear and the Tu-160 Blackjack—which are being modernized to operate beyond 2030. The Bear can carry up

to 16 AS-15 nuclear-armed cruise missiles, while the Blackjack can carry up to 12. Both aircraft are capable of carrying nuclear gravity bombs. Moscow will complete development of its new PAK-DA bomber within a decade, which will include stealth capabilities and employ both conventional and nuclear armament.

Russia's hypersonic weapons, such as the Kinzhal, Tsirkon, and Avangard, provide Moscow with a myriad of escalation options within its portfolio. These weapons present intercept challenges to current air defense systems. Finally, we remain concerned that Russia may intend to put a space-based nuclear weapon on orbit. [...]

Democratic People's Republic of Korea

In 2024, Kim Jong Un vowed to intensify efforts to make his nuclear force fully ready for combat with the United States. [...] Pyongyang also continues to increase its stockpile of plutonium and highly enriched uranium in support of its nuclear program. [...]

North Korea launched two solid-propellant ballistic missiles purportedly loaded with hypersonic payloads in 2024 and debuted a new, more powerful solid-propellant ICBM. Increasing reliance on solid-propellant systems allows Pyongyang to launch missiles with much less warning than before. [...]

In 2023, North Korea claimed to unveil a tactical nuclear warhead capable of being mounted on at least eight delivery systems, including an unmanned underwater vehicle. In 2024, Kim Jong Un inspected a project to construct the country's first SSBN, although this capability is unlikely to be realized in the next decade.

Islamic Republic of Iran

The Islamic Republic of Iran continues to expand its nuclear program by increasing its stockpile of highly enriched uranium and deploying additional advanced centrifuges. Tehran has reduced the time required to produce sufficient weapons-grade uranium for a nuclear device from 10-15 days to presumably less than one week.

Iran possesses the region's largest arsenal of conventional ballistic missiles, which it employed in attacks on Israel last year. Tehran continues to proliferate advanced conventional weapons to non-state militia groups across the Middle East, resulting in attacks against U.S. and partner personnel and interests, undermining regional stability. Iran's work on space-launch vehicles—including its two-stage, liquid-fueled Simorgh satellite carrier rocket—likely shortens the timeline to produce an ICBM due to the similarities in technology. This rocket could have a 2,400 mile range with a 2,200 pound payload.

Growing Transactional Relationships

A defining feature of today's evolving strategic environment is the increasing prevalence of transactional relationships amongst nuclear-armed competitors and nuclear aspirants. Technology exchanges, troop deployments, combined exercises, and public affirmations of each other's violations of international law are increasing. The possibility of simultaneous conflicts makes complex escalation dynamics even more challenging.

China's "comprehensive strategic partnership of coordination" with Russia entails an increasing degree of military cooperation. Sino-Russian cooperation occurs through exchanges of training, equipment, technology, high-level visits, and other coordination mechanisms. Beijing is Moscow's top supplier of machine tools, microelectronics, and nitrocellulose—all critical to making munitions and rocket propellants—and Russia is using these items to ramp up its defense industrial base and circumvent extensive sanctions.

Iran and the DPRK are also contributing to the war in Ukraine. Tehran has been providing armed drones to Russia since 2022, as well as transferring hundreds of short-range ballistic missiles to Moscow and training personnel to operate these weapons. The DPRK has delivered over 11,000 troops and 16,500 containers of weapons and ammunition to Russia, including ballistic missiles, launchers, and millions of artillery rounds. Moscow has also signed a security pact with Pyongyang, which reportedly includes a mutual defense clause.

Accomplishing the Mission: The Triad and Other Core Functions

To address the challenges posed by the complex security environment, the United States must remain committed to sustaining legacy triad systems and completing the multi-generational, decades-long modernization of the nuclear deterrent, including all three legs of the triad and critical NC3 systems. As we modernize our capabilities, we must retain credible forces to deter strategic attacks, assure Allies and partners, and achieve U.S. objectives should deterrence fail. [...]

Minuteman III

[...] Asset attrition, aging, parts obsolescence, and sustainment shortfalls present operational challenges. Sustaining this capability until its replacement is fielded requires continued national investment to address specialized equipment and replacement parts availability. MMIII must remain an operationally effective and credible deterrent until fully replaced by the Sentinel ICBM.

Sentinel

Sentinel's accuracy, range, responsiveness, safety, security, and sustainment capabilities will ensure the ICBM force remains a potent warfighting capability and a credible land-based nuclear deterrent through at least 2080. A complex mega-project replacing every facet of the MIII, Sentinel will be accompanied by a secure and robust NC3 capability, a new missile, and hundreds of infrastructure projects, including hardened facilities spread across five states. The program consists of ICBM silos, thousands of miles of modern fiber optic cabling, acquisition of permanent and temporary real estate easements, and operational site activation efforts necessary to support the construction workforce and development of the Sentinel weapon system.

Any further Sentinel delay will increase USSTRATCOM's operational risk and impact the credibility of our deterrent. [...]

OHIO-Class SSBN

The fourteen OHIO-Class submarines represent seventy-percent of our Nation's day-to-day nuclear capabilities. While a sufficient deterrent today, the fleet has been life extended to an unprecedented 42 years and will continue to face sustainment and readiness challenges until replaced by COLUMBIA-class submarines. OHIO will start decommissioning about one hull per-year beginning in 2027. [...]

COLUMBIA-Class SSBN

The COLUMBIA program of record (POR) will deliver at least 12 SSBNs, the absolute minimum required to meet strategic guidance. [...] The COLUMBIA-class SSBN remains a high USSTRATCOM priority strategic deterrent program and must achieve its first strategic deterrent patrol by 2031 to avoid an unacceptable capability gap. [...]

Sea-Launched Cruise Missile – Nuclear (SLCM-N)

The SLCM-N, established as a new POR by the fiscal year 2024 (FY2024) National Defense Authorization Act (NDAA), will provide additional at-sea nuclear deterrent capability. This program will provide much-needed low-yield, non-ballistic, survivable, and persistent nuclear capability without visible generation, offering additional range, flexibility, and survivability for extended deterrence and assurance. [...]

B-52H Modernization

The B-52H is a 65-year-old platform slated to remain in service for at least another 25 years. It is critical to providing flexible strategic deterrence options to the President and is the threshold platform to carry the Long Range Standoff (LRSO) weapon. [...]

B-2 Modernization

The B-2 fleet remains the world's only low-observable bomber able to penetrate denied environments while employing a wide variety of munitions against high-value strategic targets. With advancements and proliferation of anti-access and area denial technology, the capabilities provided by the B-2 remain critical to strategic deterrence and our ability to execute missions around the globe. [...]

B-21 Raider

The B-21 Raider will form the backbone of America's future bomber force, replacing conventional B-1 bomber and nuclear-capable B-2 bomber fleets. The B-21 will ensure USSTRATCOM's ability to penetrate advanced air defenses far into the future and will provide strategic and operational flexibility across a wide range of military objectives. The program is on track to meet USSTRATCOM operational requirements, with the first aircraft scheduled for delivery in the late 2020s. [...]

Air-Launched Cruise Missile / Long Range Standoff Weapon

The Long Range Standoff (LRSO) weapon will replace the Air Launched Cruise Missile (ALCM) as our Nation's air-delivered standoff nuclear capability. It is optimized for the future with a planned 30-year service life. The LRSO weapon will provide the President with flexible and scalable options capable of penetrating and surviving against advanced air defenses—a key attribute and critical component to all USSTRATCOM operational plans. [...]

Tanker Support

The demand for tankers across Combatant Commands continues to grow. A robust tanker fleet is essential to sustaining global reach for all USSTRATCOM missions. The KC-135 serves as the backbone of U.S. air refueling capability. Tanker modernization and expansion efforts are imperative for concurrent operations encompassing strategic, theater, and homeland defense missions across CCMDs. [...]

Regional Deterrence Capabilities

[...] The United States' forward deployed nuclear weapons in Europe are critical to NATO's nuclear deterrence. [...] Russia, China, and North Korea are developing theater nuclear weapons in an attempt to offset the United States' and its Allies' asymmetrical conventional superiority and to create deterrence challenges of their own at the regional level. [...]

The DoD and the Nation are reliant on aging NC3 systems with a no-fail mission. As with the triad, we must sustain these systems until the next generation of NC3 is fielded. Key focus areas for USSTRATCOM include: the Survivable Airborne Operations Center (SAOC), E-130J Take Charge and Move Out (TACAMO) recapitalization, satellite communications, missile warning/missile tracking systems, the ground-based components of NC3 such as the Fixed Submarine Broadcast System radio transmitter sites, and securing data and information processes in cyberspace. [...]

Key to long-term viability is cybersecurity integration and sustainment throughout program lifecycle and tailored incorporation of artificial intelligence / machine learning (AI/ML) and advanced data analytics for improved situational awareness and timely response. [...]

A robust set of nuclear and non-nuclear capabilities, effective across a range of potential conflict scenarios, is necessary to successfully conclude conflict while managing escalation. As part of our deterrence strategy, USSTRATCOM is expanding efforts towards Conventional Nuclear Integration (CNI).

CNI encompasses more than kinetic conventional support to nuclear operations and requires the integration of non-kinetic capabilities to complement and enhance nuclear operations. Operations in the information environment (OIE) capabilities—to include cyber, space, EMS operations, military information support to operations (MISO), and public affairs capabilities—should be leveraged to influence the decisions of competitor leadership. The integrated employment of these forces and capabilities, combined with conventional and nuclear operations, must be considered throughout all phases—from competition to conflict. [...]

Conventional Kinetic Operations

Two decades ago, USSTRATCOM recognized the need for a conventional prompt global strike weapon system to hold distant, defended, and/or time-critical threats at risk when other forces are unavailable, incapable, or not preferred. The need for these weapons is more important today as we witness the rapid expansion of adversary military capabilities and rising tensions around the world. USSTRATCOM will use long-range precision strike conventional munitions to enhance the traditional capabilities inherent in the nuclear triad

and implement CNI initiatives, in turn bolstering deterrence capabilities in support of strategic deterrence.

Hypersonic weapons provide a highly responsive, long-range, non-nuclear strike capability to hold critical targets at risk across all stages of conflict. Hypersonic weapons will also mitigate shortfalls in current standoff conventional weapons capacity and capability. We support the Services' continued development of hypersonic weapon systems through flight test programs, robust modeling and simulation, and ground testing.

USSTRATCOM continues to advocate for rapid development and fielding of advanced conventional capabilities, including the Army's Long Range Hypersonic Weapon and Navy's Conventional Prompt Strike. Partnerships leveraging commercial infrastructure and launch vehicle providers significantly increase the Nation's capacity for ground and flight testing of hypersonic payloads and technologies. [...]

The Asymmetric Advantage of Allies & Partners

U.S. Allies and partners are a critical component of deterrence and provide an asymmetric advantage that potential adversaries cannot outmatch. China, Russia, DPRK, and Iran do not integrate as we do through planning, exercising, and combined operations. [...]

Last year, our SSBN forces integrated across five CCMDs and five Allied nations, successfully synchronizing near-simultaneous Pacific, Atlantic, and Caribbean submarine operations. Our Bomber Task Force global campaign operations included over 200 days of overseas presence, 140+ missions in partnership with all CCMDs, and integration with 35 partner nations in FY2024—effectively projecting U.S. global strike power and interoperability. [...]

In alignment with the 2023 DoD National Defense Industrial Strategy, we advocate to expand stockpiles of the critical parts, finished goods, and commodities needed to meet production requirements for conducting sustained campaigns against adversaries. [...]

Current shipyard infrastructure capacity is insufficient to accommodate the one COLUMBIA-class SSBN plus two VIRGINIA-class SSNs per-year build plan (1+2 build plan) by FY2026 (the year in which COLUMBIA-class serial production starts). [...]

Stockpile and Weapons Infrastructure

Today's stockpile is sufficient to achieve current strategic deterrence objectives. Sustaining this for the long term will require confidently assessing the performance of aged weapons until they can be replaced, on-time fielding of replacement weapons, and the infrastructure to support both. While we can currently mitigate these risks, they do potentially impact the long-term viability of weapons in all three legs of the strategic triad.

The credibility of strategic deterrence relies on the effectiveness of the stockpile and the infrastructure needed to maintain the current weapons while producing modern replacements. This requires a Nuclear Security Enterprise (NSE) with efficiencies in development and production processes, modular weapon designs to enable rapid adaptability to meet emerging needs, and an enterprise-wide science, technology, and engineering (ST&E) effort to enable the development and maturation of technologies outside of specific stockpile programs. [...]

The NNSA [National Nuclear Security Administration] completed the first production unit for a war reserve W87-1 plutonium pit, and is now working towards rate production of 30 pits per-year at Los Alamos National Laboratory and 80 pits per-year overall. Re-establishing a credible plutonium pit manufacturing capability remains the top stockpile priority, but we must not lose sight of other initiatives—including uranium manufacturing, high explosives manufacturing, lithium processing, tritium production, radiation-hardened electronics production, and non-nuclear components production. Continuous production is absolutely necessary to ensure the United States is postured to address long-term challenges.

Additional stockpile modernization progress was achieved with completion of the B61-12 life extension program and the W88 Alteration 370 program remains in full-scale production; the B61-13 was also established as a POR. As with infrastructure modernization, considerable work remains to modernize the nuclear weapons stockpile, including the air-leg's W80-4, the land-leg's W87-1/Mk21A, and the sea-leg's W93/Mk7. It is imperative these programs remain on track or the Nation will continue to rely on older weapons with increasing uncertainty in their viability into 2040 and beyond. [...]

Missile Threat Assessment

Maintaining USSTRATCOM's ability to deter and respond to strategic attack by potential adversaries requires defenses against all types of advanced missiles and other novel delivery systems. Pursuant to the January 27, 2025, Executive Order on the Golden Dome for America, and in cooperation with the Office of the Secretary of Defense, U.S. Northern Command, and other DoD stakeholders, we are actively assessing strategic missile threats and prioritizing a set of locations to defend against a counter-value attack by nuclear-armed adversaries. Defending North America and our interests around the globe—to include the Arctic—is inherently linked to the ability of the Joint Force to operate. We also support improvements in early warning, identification, tracking, discrimination, and attribution for the full range of advanced air and missile threats to the homeland and our strategic forces to support U.S. Space Command's trans-regional missile defense responsibilities. [...]

Document No. 2. Statement of General Stephen N. Whiting, Commander, United States Space Command before the Senate Armed Services Committee, Subcommittee on Strategic Forces, March 26, 2025, select excerpts.

[...] Our guiding principle is clear: to secure peace, we must be prepared for conflict extending to space, and if deterrence fails, we will fight and win. USSPACECOM will uphold this principle in the face of operational threats, which are expanding at a breathtaking pace and which are being fielded deliberately and specifically to challenge the United States, the American way of life, and hold the Joint Force at risk. [...] The increasing lethality and proliferation of space-enabled and cyber threats displayed in Ukraine and the Middle East, and the rapid advance of China's capabilities, demonstrate that winning the space fight is foundational to defending the nation, the readiness of the nation's forces, and reestablishing deterrence. [...]

Our opponents are rapidly delivering counterspace capabilities and new weapons that operate in, from, and to space.

Deterrence in space is consistent with other operational theaters: it requires a keen understanding and clear communication of what we are deterring against; credible acknowledged capabilities to impose unacceptable costs on those who would attack us; and resilient architectures to dissuade attack by denying the adversary the benefit they seek. We need to make clear that cost imposition need not be limited to the domain of the initial action. Achieving this level of deterrence demands not only strategic intent but also the timely development and fielding of new space capabilities. [...]

Today, we face concurrent and accelerating threats. These threats, extensively discussed over the years, are no longer future possibilities but operational realities. They span terrestrial, on-orbit, and cyber capabilities holding space systems in all orbital regimes at risk, capable of restricting Joint Force freedom of action in all domains and attacking the homeland with little warning. Naturally occurring threats, such as severe solar activity, also pose risks to the longevity and functionality of on-orbit assets. [...]

China

China views space technologies as critical to its goal of becoming the dominant power in East Asia and a global superpower. The People's Republic of China (PRC) seeks to rival the United States in nearly all areas of space technology by 2030 and establish itself as the world's preeminent space power by 2045. Since 2015, China's on-orbit presence has grown 1000 percent, with 1094 active satellites as of January 2025. Its sophisticated space and counterspace systems enhance its ability to secure territorial claims, project power, and challenge U.S. advantages.

China integrates space capabilities with advanced missiles, enabling the People's Liberation Army (PLA) to find, fix, track, and target U.S. and Allied terrestrial forces using long-range, over-the-horizon, precision missiles to disrupt logistics and limit operational freedom in the Indo-Pacific area of responsibility (AOR). The PLA relies on over 300 intelligence, surveillance, and reconnaissance (ISR) satellites equipped with advanced sensors to detect U.S. aircraft carriers and expeditionary forces. Additionally, China's BeiDou Positioning, Navigation, and Timing (PNT) system provides precision targeting, coordination of troop movements, and advanced C2 capabilities.

China's counterspace operations seek to undermine how the U.S. military fights by disrupting or destroying space capabilities which are foundational to Joint Force operational concepts, effectively blinding and deafening friendly forces. The PLA is also developing on-orbit, maneuverable counterspace satellites to target our satellites using dual-use technologies, such as the Shijian-21 satellite, for potential offensive purposes against satellites we rely on to defend the homeland and project power. China's experimental satellites and operational ground-based systems, like direct-ascent antisatellite missiles, lasers, and jammers, give the PLA robust lethal and non-lethal counterspace options across the spectrum of conflict. Additionally, in 2024 Chinese scientists revealed efforts to develop a novel microwave weapon that could target satellites, reflecting a comprehensive counterspace approach.

China also leverages international partnerships and cutting-edge projects to challenge U.S. leadership in space. In 2024, it hosted the China-Latin America and Caribbean Space Cooperation Forum to promote collaboration on space infrastructure and governance. China is also advancing Space Situational Awareness with tracking stations in Egypt and a space debris monitoring project in the Asia-Pacific region. China is investing in reusable launch vehicles to increase its spacelift capacity while lowering costs, and it is moving quickly in planetary exploration to potentially secure strategic advantages in key space terrain. Milestones such as the Chang'e-6 mission, which impressively returned lunar samples from the Moon's far side, further demonstrates China's growing space capabilities. These advancements, paired with international partnerships, underscore Beijing's strategy to erode U.S. leadership and establish itself as the dominant space power.

Russian Federation

Russia's space program remains a strategic priority for the Kremlin despite significant challenges from sanctions, international isolation, and funding constraints. Key efforts include developing a new Russian space station, advancing nuclear power in space, and enhancing Arctic monitoring for military operations. [...] Russia has also expanded its space-based support for operations in Ukraine with the launch of multiple satellites providing enhanced ISR since February 2022.

Russia has declared commercial satellites used for military operations as valid and legitimate targets. Russia continues to advance electromagnetic warfare (EW), directed energy, cyber, and both ground-based and co-orbital ASAT capabilities. In 2024 and already in 2025, Russian EW systems disrupted PNT services in the Baltic, Black Sea, and Mediterranean regions, causing flight diversions and Global Positioning System inaccuracies. These activities underscore Moscow's ability and willingness to degrade military and civilian space systems and highlight the challenge with maintaining credible deterrence.

Most concerning, Russia is pursuing the possible placement of a nuclear weapon on-orbit. Detonating a nuclear weapon on-orbit would have indiscriminate effects, potentially disrupting the global use of space for security, economic, and scientific purposes. [...]

Russia is also expanding space partnerships with its allies and U.S. strategic opponents. In June 2024, Russia and the DPRK signed a comprehensive strategic partnership treaty that includes provisions for mutual defense and space collaboration. In October, demonstrating their growing collaboration, Iran sent two satellites to Russia for space launch services. Russia also continues to work with China on development of the International Lunar Research Station, BeiDou-GLONASS integration, and space debris monitoring. [...]

Evolving Missile Threats

The U.S. homeland and national interests face growing threats from the expanding and evolving offensive missile capabilities of peer, near-peer, and rogue adversaries. These advanced systems—including hypersonic glide vehicles (HGVs) and fractional orbital bombardment platforms (FOBS)—can launch into, transit through, or even originate from space, crossing multiple Combatant Commanders' AORs before striking their targets. The increasing diversity and proliferation of these technologies complicate tracking, targeting, engagement, and determination of intended target location.

China continues to develop its wide-ranging missile program and is now the global leader in hypersonic payload capability. In 2021, a Chinese FOBS launch saw an HGV travel 25,000 miles within the defined space AOR before re-entering the atmosphere, aggressively maneuvering to strike a target in the Chinese mainland, which could just as easily have been a target within our homeland, like Washington, D.C., New York, or Los Angeles.

Russia's continued missile advancements strain U.S. sensors and defenses. Moscow has fielded three hypersonic systems with air, land, and sea launch options, featuring ranges over 6,000 miles carrying both conventional and nuclear capabilities, including two types of nuclear-armed HGVs. These advanced and long-range threats highlight the urgency to build the Golden Dome for America to protect our borders and skies against foreign coercion and aggression. [...]

Operate Through a First Strike

Our most stressing scenario is operating through a first strike from an undeterred adversary while ensuring the space capabilities essential for victory continue to operate. We must anticipate, defend against, recover from, and immediately respond to a wide range of scenarios, conditions, and threats. Doing so will require robust defensive capabilities and resilient architectures across our integrated space enterprise.

The most consequential threat to our resilience is an attack on the United States from ballistic, hypersonic, and advanced cruise missiles, as well as emerging space-based weapons. Our legacy systems—Space Domain Awareness (SDA), space-based and terrestrial Missile Warning and Missile Defense, and satellite-enabled Nuclear Command, Control, and Communications—remain as vital today as ever in protecting the homeland. Recognizing this, our adversaries have developed terrestrial and on-orbit weapons designed to threaten these critical space capabilities, underscoring the urgent need to strengthen our defenses. [...]

Quickly and Seamlessly Transition from Crisis to Conflict

Our ability to quickly and seamlessly transition from crisis to conflict is essential to providing national leadership broad options and greater flexibility. Clear understanding of authorities, international agreements, access/basing/overflight requirements, and force posture are key tools we continue to develop. Robust and persistent campaigning simultaneously enhances deterrence and postures for conflict. [...]

Deploy, Regenerate, and Reconstitute Space Forces

[...] On orbit, sustained space operations require the right mix of responsive launch, sustained maneuverability, and logistics to allow for the operational availability, movement, and maneuver required to achieve a position of advantage over an adversary. These sustainment activities need to occur simultaneously across all domains, ensuring resilience and survivability throughout all phases of conflict.

Achieving sustained space maneuver requires investment in purpose-built systems—on-orbit refueling, in-space assembly, modular hardware upgrades, and urgent orbital resupply—to revolutionize how USSPACECOM achieves and maintains space superiority. Legacy space systems were constrained by the technological limitations of their era, launched with finite fuel and fixed payloads that offered minimal operational maneuverability, flexibility, or defensive capability. Future systems must overcome these limitations by enabling greater flexibility through dynamic maneuver, upgradability, and resupply. Platforms designed to support space maneuver should provide the capability and

capacity needed to deter adversaries, maintain initiative, and conduct operations across all phases of competition and conflict. [...]

To enhance flexibility, operational effectiveness, and resilience, USSPACECOM also requires sustained investment in terrestrial mobile and transportable capabilities. These include EW capabilities like the USSF's Counter Communications System and the U.S. Army's Mobile and Theater Integrated Ground Suites; the U.S. Marine Corps' Electromagnetic Reconnaissance System; missile warning nodes such as the Space-Based Infrared System Survivable/Endurable Evolution; and agile SDA capabilities provided by the U.S. Navy's Aegis Combat System. These mobile elements are critical for augmenting fixed networks, closing coverage gaps, and expanding the battlefield geometry of our space enterprise to counter evolving and dynamic threats.

Achieve Space Superiority

Our ability to achieve space superiority is foundational to Joint Force success. To deter strategic competitors, defend U.S., Allied, Partner, commercial interests, and protect the Nation and Joint Force, the Services require funding for three essential space superiority capabilities: Integrated Space Fires, Enhanced Battlespace Awareness for Space Operations, and Resilient, Timely Operational Space C2.

Integrated Space Fires are our most pressing need and are reflected as such in our Integrated Priority List. [...]

USSPACECOM requires the requisite near-real-time domain awareness to close our kill chains, interdict adversary kill chains, and to outpace adversaries in today's increasingly congested and contested space environment. Legacy SDA systems lack agility, making investment in interoperable sensors and dynamic architectures critical for timely detection, tracking, and characterization of space objects. [...] However, more advanced space-based and terrestrial systems are needed to dynamically track spacecraft in nonstandard orbits and, eventually, in farther regions beyond geostationary earth orbit out to Cislunar orbit. [...]

Resilient and timely space C2 is essential to closing friendly kill chains, deterring hostile actions, and defending U.S., Allied, and Partner interests. A modernized C2 capability is critical for managing space domain operations and supporting terrestrial operations in which space effects are vital. [...]

We are at a critical juncture. Our most pressing threat, China, is marching towards General Secretary Xi Jinping's directed timeline for his armed forces to be ready to militarily reunite with Taiwan, a date that is now less than two years away. Though this is not a prediction of conflict, it is a reality that must be taken seriously. Furthermore, we are being threatened

terrestrially and on-orbit with capabilities that seek to not only dull our ability to support the Joint Force, but also our ability to defend the homeland.

[...] Should deterrence fail, however, the integrated space power of our Joint, Interagency, Combined, and commercial team will provide a decisive advantage in any conflict. By realizing the full potential of our integrated space enterprise and elements of victory, we will prevail. [...]

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Document No. 3. Remarks by NATO Secretary General Mark Rutte with U.S. Vice President JD Vance in the margins of the Munich Security Conference, February 14, 2025.¹

(As delivered)

Thank you so much Mr Vice President. And it's a pleasure to see you again.

And I want to thank you for the American people, for everything you are doing to keep the whole world safe, basically.

And I know there are many theatres in the world you really have to take your attention to.

So I do understand the issue of burden sharing. It is crucial.

I also want to thank you personally for everything you have done over the years in engaging with Europe. It has been noted. You have been here before and it's really important.

And I look forward also, from that perspective, to our talks. And on Europe stepping up, European part of NATO stepping up, you are absolutely right. It has to be done. We have to grow up in that sense, and spend much more. We have also had to discuss the defence industrial base.

This is a problem we have both in the US and in the rest of NATO. We are simply not producing enough. We are not keeping up with the Russians and the Chinese.

And then, of course, Ukraine: how to bring Ukraine to a lasting peace. No Minsk again. So it has to be lasting. Putin should never try it again.

¹ See, "Remarks," *NATO.int*, February 14, 2025, available at https://www.nato.int/cps/en/natohq/opinions_233217.htm?selectedLocale=en.

And how to get them into a place of maximum strength when the talks starts.

So a lot to discuss and really looking forward also to build the relationship.

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Document No. 4. Remarks by Vice President JD Vance, Munich Security Conference, February 14, 2025.²

Well, thank you and thanks to all the gathered delegates and luminaries and media professionals, and thanks especially to the host of the Munich Security Conference for being able to put on such an incredible event.

We're, of course, thrilled to be here. We're happy to be here. And one of the things that I wanted to talk about today is, of course, our shared values.

And it's great to be back in Germany. As you heard earlier, I was here last year as United States Senator. I saw a foreign minister, excuse me, foreign secretary David Lammy and joked that both of us last year had different jobs than we have now.

But now it's time for all of our countries, for all of us who have been fortunate enough to be given political power by our respective peoples to use it wisely to improve their lives.

And I want to say that I was fortunate in my time here to spend some time outside the halls of this conference over the last 24 hours. And I've been so impressed by the hospitality of the people, even of course, as they're reeling from yesterday's horrendous attack. And the first time I was ever in Munich was with my wife actually who's here with me today on a personal trip.

And I've always loved the city of Munich and I've always loved its people. And I just want to say that we're very moved and our thoughts and prayers are with Munich and everybody affected by the evil inflicted on this beautiful community. We're thinking about you. We're praying for you and we will certainly be rooting for you in the days and weeks to come.

Now, I hope that's not the last bit of applause that I get, but we gather at this conference, of course, to discuss security. And normally we mean threats to our external security. I see many great military leaders gathered here today.

² See, "Remarks at the Munich Security Conference," *YouTube*, February 14, 2025, available at <https://www.youtube.com/watch?v=pCOsgfINdKg>.

But while the Trump administration is very concerned with European security and believes that we can come to a reasonable settlement between Russia and Ukraine, and we also believe that it's important in the coming years for Europe to step up in a big way to provide for its own defense, the threat that I worry the most about vis-a-vis Europe is not Russia, it's not China, it's not any other external actor.

And what I worry about is the threat from within. The retreat of Europe from some of its most fundamental values, values shared with the United States of America. Now, I was struck that a former European commissioner went on television recently and sounded delighted that the Romanian government had just annulled an entire election. He warned that if things don't go to plan, the very same thing could happen in Germany too. Now, these cavalier statements are shocking to American ears. For years we've been told that everything we fund and support is in the name of our shared democratic values.

Everything from our Ukraine policy to digital censorship is billed as a defense of democracy. But when we see European courts canceling elections and senior officials threatening to cancel others, we ought to ask whether we're holding ourselves to an appropriately high standard. And I say ourselves because I fundamentally believe that we are on the same team. We must do more than talk about democratic values. We must live them.

Now within living memory of many of you in this room, the Cold War positioned defenders of democracy against much more tyrannical forces on this continent. And consider the side in that fight that censored dissidents, that closed churches, that canceled elections. Were they the good guys? Certainly not. And thank God they lost the Cold War.

They lost because they neither valued nor respected all of the extraordinary blessings of liberty, the freedom to surprise, to make mistakes, to invent, to build. As it turns out, you can't mandate innovation or creativity just as you can't force people what to think, what to feel or what to believe. And we believe those things are certainly connected.

And unfortunately, when I look at Europe today, it's sometimes not so clear what happened to some of the Cold War's winners. I look to Brussels, where EU commissars warn citizens that they intend to shut down social media during times of civil unrest, the moment they spot what they've judged to be "hateful content," or to this very country where police have carried out raids against citizens suspected of posting anti-feminist comments online as part of "combating misogyny on the internet, a day of action."

I look to Sweden where two weeks ago the government convicted a Christian activist for participating in Quran burnings that resulted in his friend's murder. And as the judge in his case, chillingly noted, "Sweden's laws to supposedly protect free expression do not in fact grant," and I'm quoting, "a free pass to do or say anything without risking offending the group that holds that belief."

And perhaps most concerningly, I look to our very dear friends, the United Kingdom, where the back slide away from conscience rights has placed the basic liberties of religious Britons in particular in the crosshairs. A little over two years ago, the British government charged Adam Smith Connor, a 51-year-old physiotherapist, and an army veteran, with the heinous crime of standing 50 meters from an abortion clinic and silently praying for three minutes. Not obstructing anyone, not interacting with anyone, just silently praying on his own.

And after British law enforcement spotted him and demanded to know what he was praying for, Adam replied simply it was on behalf of the unborn son he and his former girlfriend had aborted years before. Now the officers were not moved. Adam was found guilty of breaking the government's new buffer zones law, which criminalizes silent prayer and other actions that could influence a person's decision within 200 meters of an abortion facility. He was sentenced to pay thousands of pounds in legal costs to the prosecution.

Now, I wish I could say that this was a fluke, a one-off crazy example of a badly written law being enacted against a single person. But no, this last October, just a few months ago, the Scottish government began distributing letters to citizens whose houses lay within so-called safe access zones, warning them that even private prayer within their own homes may amount to breaking the law. Naturally, the government urged readers to report any fellow citizen suspected guilty of thought crime.

In Britain and across Europe, free speech I fear is in retreat. And in the interest of comedy, my friends, but also in the interest of truth, I will admit that sometimes the loudest voices for censorship have come not from within Europe, but from within my own country, where the prior administration threatened and bullied social media companies to censor so-called misinformation.

Misinformation, like for example, the idea that Coronavirus had likely leaked from a laboratory in China, our own government encouraged private companies to silence people who dared to utter what turned out to be an obvious truth.

So, I come here today, not just with an observation, but with an offer. And just as the Biden administration seemed desperate to silence people for speaking their minds, so the Trump administration will do precisely the opposite, and I hope that we can work together on that.

And in Washington, there is a new sheriff in town. And under Donald Trump's leadership, we may disagree with your views, but we will fight to defend your right to offer it in the public square. Agree or disagree.

Now, we're at the point of course that the situation has gotten so bad that this December, Romania straight up canceled the results of a presidential election based on the flimsy

suspicious of an intelligence agency and enormous pressure from its continental neighbors. Now, as I understand it, the argument was that Russian disinformation had infected the Romanian elections, but I'd ask my European friends to have some perspective.

You can believe it's wrong for Russia to buy social media advertisements to influence your elections. We certainly do. You can condemn it on the world stage even. But if your democracy can be destroyed with a few hundred thousand dollars of digital advertising from a foreign country, then it wasn't very strong to begin with.

Now, the good news is that I happen to think your democracies are substantially less brittle than many people apparently fear. And I really do believe that allowing our citizens to speak their mind will make them stronger still, which of course brings us back to Munich, where the organizers of this very conference have banned lawmakers representing populist parties on both the left and the right from participating in these conversations.

Now, again, we don't have to agree with everything or anything that people say, but when people represent, when political leaders represent an important constituency, it is incumbent upon us to at least participate in dialogue with them.

Now to many of us on the other side of the Atlantic, it looks more and more like old entrenched interests hiding behind ugly Soviet era words like misinformation and disinformation who simply don't like the idea that somebody with an alternative viewpoint might express a different opinion, or God forbid, vote a different way or even worse win an election.

Now this is a security conference, and I'm sure you all came here prepared to talk about how exactly you intend to increase defense spending over the next few years in line with some new target. And that's great because as President Trump has made abundantly clear, he believes that our European friends must play a bigger role in the future of this continent. We don't think, you hear this term burden sharing, but we think it's an important part of being in a shared alliance together that the Europeans step up while America focuses on areas of the world that are in great danger.

But let me also ask you, how will you even begin to think through the kinds of budgeting questions if we don't know what it is that we are defending in the first place?

I've heard a lot already in my conversations, and I've had many, many great conversations with many people gathered here in this room. I've heard a lot about what you need to defend yourselves from, and of course that's important, but what has seemed a little bit less clear to me and certainly I think to many of the citizens of Europe is what exactly it is that you're defending yourselves for.

What is the positive vision that animates this shared security compact that we all believe is so important? And I believe deeply that there is no security if you are afraid of the voices, the opinions, and the conscience that guide your very own people.

Europe faces many challenges, but the crisis this continent faces right now, the crisis I believe we all face together is one of our own making. If you're running in fear of your own voters, there is nothing America can do for you nor for that matter is there anything that you can do for the American people who elected me and elected President Trump.

You need democratic mandates to accomplish anything of value in the coming years. Have we learned nothing that thin mandates produce unstable results, but there is so much of value that can be accomplished with the kind of democratic mandate that I think will come from being more responsive to the voices of your citizens.

If you're going to enjoy competitive economies, if you're going to enjoy affordable energy and secure supply chains, then you need mandates to govern, because you have to make difficult choices to enjoy all of these things.

And of course, we know that very well in America. You cannot win a democratic mandate by censoring your opponents or putting them in jail, whether that's the leader of the opposition, a humble Christian praying in her own home, or a journalist trying to report the news. Nor can you win one by disregarding your basic electorate on questions like who gets to be a part of our shared society?

And of all the pressing challenges that the nations represented here face, I believe there is nothing more urgent than mass migration. Today almost one in five people living in this country moved here from abroad. That is, of course, an all time high. It's a similar number by the way, in the United States, also an all time high.

The number of immigrants who entered the EU from non-EU countries doubled between 2021 and 2022 alone. And of course, it's gotten much higher since. And we know the situation, it didn't materialize in a vacuum.

It's a result of a series of conscious decisions made by politicians all over the continent and others across the world over the span of a decade. We saw the horrors wrought by these decisions yesterday in this very city.

And of course, I can't bring it up again without thinking about the terrible victims who had a beautiful winter day in Munich ruined. Our thoughts and prayers are with them and will remain with them. But why did this happen in the first place? It's a terrible story, but it's one we've heard way too many times in Europe, and unfortunately too many times in the United

States as well, an asylum seeker, often a young man in his mid-twenties, already known to police, rams a car into a crowd and shatters a community.

How many times must we suffer these appalling setbacks before we change course and take our shared civilization in a new direction? No voter on this continent went to the ballot box to open the floodgates to millions of unvetted immigrants. But you know what they did vote for?

In England they voted for Brexit. And agree or disagree, they voted for it. And more and more all over Europe, they're voting for political leaders who promised to put an end to out-of-control migration.

Now, I happen to agree with a lot of these concerns, but you don't have to agree with me. I just think that people care about their homes, they care about their dreams, they care about their safety and their capacity to provide for themselves and their children, and they're smart.

I think this is one of the most important things I've learned in my brief time in politics, contrary to what you might hear a couple mountains over in Davos, the citizens of all of our nations don't generally think of themselves as educated animals or as interchangeable cogs of a global economy.

And it's hardly surprising that they don't want to be shuffled about or relentlessly ignored by their leaders. And it is the business of democracy to adjudicate these big questions at the ballot box.

I believe that dismissing people, dismissing their concerns or worse yet, shutting down media, shutting down elections or shutting people out of the political process protects nothing.

In fact, it is the most surefire way to destroy democracy. And speaking up and expressing opinions isn't election interference. Even when people express views outside your own country, and even when those people are very influential. And trust me, I say this with all humor, if American democracy can survive 10 years of Greta Thunberg scolding, you guys can survive a few months of Elon Musk.

But what German democracy, what no democracy, American, German, or European will survive, is telling millions of voters that their thoughts and concerns, their aspirations, their pleas for relief are invalid or unworthy of even being considered.

Democracy rests on the sacred principle that the voice of the people matters. There's no room for firewalls. You either uphold the principle or you don't.

Europeans, the people have a voice. European leaders have a choice. And my strong belief is that we do not need to be afraid of the future. You can embrace what your people tell you, even when it's surprising, even when you don't agree.

And if you do so, you can face the future with certainty and with confidence knowing that the nation stands behind each of you. And that to me is the great magic of democracy. It's not in these stone buildings or beautiful hotels. It's not even in the great institutions that we have built together as a shared society.

To believe in democracy is to understand that each of our citizens has wisdom and has a voice. And if we refuse to listen to that voice, even our most successful fights will secure very little.

As Pope John Paul II, in my view, one of the most extraordinary champions of democracy on this continent or any other once said, "Do not be afraid."

We shouldn't be afraid of our people even when they express views that disagree with their leadership.

Thank you all. Good luck to all of you.

God bless you.

Document No. 5. Estonian Foreign Intelligence Service, *International Security and Estonia 2025*, select excerpts.³

[...] Despite suffering the largest post-World War II human losses on the battlefield, Russia's armed forces are growing. New units and formations are being established, primarily with recruited contract soldiers. Russia is not merely restoring its pre-war personnel numbers of 600,000-700,000 soldiers; this target was already reached during the partial mobilisation in autumn 2022. Since then, Russia has simultaneously worked to restore the combat readiness of its operational forces and implement force generation by creating new units staffed with contracted personnel. By 2026, the Kremlin aims to expand its military to 1.5 million soldiers. [...]

The Kremlin has chosen a path of long-term confrontation, committing to the mobilisation of additional societal resources to rebuild the military and achieve its reform goals. If Russia succeeds in continuing its military reform and forming the planned units, Estonia and NATO

³ The document can be found at <https://www.valisluureamet.ee/doc/raport/2025-en.pdf>.

will face a Russian force posture in the coming years that poses a sustained military threat. [...]

Drawing on lessons and experiences from the war in Ukraine, the Russian government is determined to ensure technological and industrial readiness for the large-scale adoption of drone technology⁴ in both military and civilian sectors. [...]

As of December 2024, Russia has used over 8,000 Shahed, Geran and Garpiya drones in Ukraine, targeting critical infrastructure in massive waves combined with other precision weapons, such as ballistic and cruise missiles. This terror tactic aims to undermine Ukrainian morale. From Russia's perspective, targeting civilian infrastructure also increases the likelihood that Ukraine will expend its limited stock of air defence resources to intercept drones. Thus, one-way attack drones can also serve as saturation decoys for Ukraine's air defences so that Russia's more expensive and capable ballistic and cruise missiles can reach their intended military targets. [...]

Sanctions have had a limited impact on Russian drone production. [...] Estimates indicate that up to 80 per cent of sanctioned Western components reach Russia through China, suggesting that representatives of manufacturers, wholesalers and intermediaries within China are almost certainly a weak link in the supply chain. China has made some efforts to restrict its state-owned and state-associated entities from supplying sanctioned goods to Russia. It has also tightened existing restrictions and introduced new ones, such as the Chinese Ministry of Commerce's export controls on certain drones and drone components imposed on 1 September 2023. Despite this, covert supplies from Chinese private companies persist, with Beijing remaining Russia's primary hub for importing high-tech and dual-use goods.

Dependency on imported components, including drone motors and engines, has been one of the most significant challenges to developing Russia's domestic drone production. [...] Although the Chinese government likely seeks to avoid the direct involvement of its state institutions in supplying sanctioned goods to Russia, it facilitates bilateral cooperation and covert transfers of dual-use components through private companies. This approach will likely decrease Russia's dependency on Western components and, in the long term, could undermine the West's ability to leverage influence in this domain. [...]

Russia's aggressive rhetoric, paired with its lack of response to Western actions, has undermined the credibility of its 2020 nuclear doctrine. Russia has issued warnings of nuclear escalation in situations that fall short of the thresholds outlined in the doctrine.

⁴ The term "drone" is used here as a general designation for unmanned vehicles, including unmanned aerial, ground and water vehicles, as well as one-way unmanned attack systems, loitering munitions, FPV [first person view] drones and similar devices.

Following this discreditation and Russia's inability to deter the West, discussions within Russia's security circles intensified after the initial setbacks of the invasion. Both public and private debates focused on finding more effective ways to leverage nuclear weapons as a deterrent.

These discussions culminated in the adoption of a new doctrine on 19 November 2024. [...] However, such doctrines carry little weight in an autocratic system like Russia's, where their primary function is to create an alarming notion in the West that the choice lies between submission and nuclear war. This doctrinal change is highly unlikely to lead to the use of nuclear weapons against Ukraine under current conditions. The use of nuclear weapons is almost certainly not automatically tied to the conditions outlined in doctrine but depends on the decisions of the Russian regime's leader.

By lowering the threshold for nuclear weapon use and continuing its intimidation tactics, Russia aims to influence Western policymakers. This includes deterring support for Ukraine and discouraging NATO from strengthening its defence capabilities near Russian borders. Intimidation has yielded some results; while Ukraine continues to receive support despite Russian threats, many countries have adopted measured approaches, creating self-imposed "red lines" that Russia can exploit.

The success of these intimidation tactics primarily hinges on the reactions of Western nations and the global community. If nuclear threats or limited use were successful in deterring Western aid to Ukraine and securing concessions for Russia, this would likely spark a wave of nuclear proliferation, with non-nuclear states increasingly viewing non-strategic nuclear weapons as a primary security guarantee.

Alongside intimidation, Russia is likely revising the role of non-strategic nuclear weapons (operational-tactical and tactical nuclear weapons) in practice. Russia's new and expanded force structure along its western flank [...] includes a non-strategic nuclear component. Exercises in the summer of 2024 covered practical aspects such as the transportation, protection and potential use of nuclear weapons, including in Kaliningrad. [...]

The Kaliningrad depot, previously in disrepair, has been renovated and expanded, becoming a focal point for Russia's 12th Main Directorate (12th GUMO), which oversees nuclear weapons. In 2024, it was upgraded to a national depot, which positions nuclear warheads and delivery systems closer to the Baltic states and reduces the early warning time for potential use. This likely indicates a shift in Russia's threat perception, intended both to further intimidate the West and to allow for faster deployment if required.

However, the military benefits of using nuclear weapons on the battlefield are limited in modern warfare. Using nuclear weapons against Ukraine would almost certainly fail to achieve strategic objectives and would instead expose the limitations of non-strategic

nuclear weapons. It would highlight the superiority of modern conventional weaponry and significantly erode Russia's nuclear deterrence credibility. Nuclear weapons and the taboo surrounding their use remain central to Russia's reputation and self-perception as a great power. Any use of these weapons would shatter this illusory status on the international stage, including among the Global South. [...]

Putin's regime appears unshakable, but beneath the polished surface, internal tensions and contradictions are building. The regime primarily responds with harsher directives, restrictions and repression, offering no substantive solutions. With resources concentrated on sustaining the war and maintaining the military-industrial complex, development in other areas has nearly ceased, leading to rapidly declining living standards. At the same time, corruption, abuse of power and financial waste continue to plague all levels of government. [...]

In addition to the increasing difficulty of securing funding for the war, these changes also underscore how critical it is for Vladimir Putin to end the war on terms favourable to him. It is almost certain that this objective is driven by his awareness that losers are not respected in Russia, and for reputational reasons alone, he must conclude the war with a result that can be portrayed as a victory. Thus, the Kremlin's leader remains motivated to secure the resources necessary to continue the war, despite its costs far exceeding the original plans and the ever-growing price Russia is paying. [...]

Military spending in the federal budget has reached record levels year after year, with nearly 18 trillion roubles allocated for defence and internal security in 2025, amounting to 40% of the federal budget.

However, there are clear signs that the surge in military-industrial output, driven by federal funding, has reached its limit. Even Russia's official statistics indicate that industrial production volumes in monetary terms have plateaued since September 2023, fluctuating by a few per cent in either direction month-to-month. Considering inflation of around 10%, actual output has either stagnated or even slightly declined. [...]

Russia's budget revenues have been robust in 2024. While the high domestic tax revenues were expected due to the infusion of wartime spending into the economy, the more than 1.5-fold increase in oil and gas revenues compared with the previous year came as a surprise – even to the Russian government. Global oil prices remained high due to OPEC+ agreements, and Russia managed to bypass Western-imposed price caps with the help of a shadow fleet and intermediaries. [...]

Inflation is running at more than twice, and sometimes even three times, the bank's target rate. To combat this, the central bank has continued to hike its base interest rate, which has reached 21% with no end to the cycle in sight. This rate hike has significantly worsened

prospects for sectors not tied to military procurement but has had little impact on the defence industry, which benefits from preferential loans. Consequently, the central bank faces an impossible task: to control inflation without being able to address its primary source. [...]

While Russia managed to mitigate the impact of oil price caps, other sanctions have significantly affected its economy. Third-party countries, including China, have begun restricting transactions with Russia out of fear of secondary US sanctions, complicating Russia's foreign trade and raising transaction costs.

The Moscow Stock Exchange can no longer trade in Western currencies due to sanctions, making it impossible to determine their actual market value. This allows Russian banks to manipulate currency rates at the expense of clients, which substantially increases the costs of export and import transactions in Western currencies for Russian companies.

Russia's "wartime economy boom" is likely to end in 2025, increasing the risk of negative surprises, such as budget revenue shortfalls. However, the economy retains significant inertia, making a sudden downturn unlikely without external shocks, although the overall trend is clearly downward. A potential negative shock could stem from a worse-than-expected performance of China's economy or the collapse of OPEC+ oil production limits, which would sharply reduce global oil prices and, by the same token, Russia's oil and gas revenues. [...]

In 2025, Russia's opposition to the West is expected to intensify. Amid the war in Ukraine, Russia is gearing up for a prolonged confrontation with NATO, which implies bolstering its western border with additional military units over the medium to long term. Putin likely views a resolution to this conflict as achievable only through a Yalta-style agreement – that is, dividing Europe into spheres of influence, undermining Ukraine's sovereignty and dismantling Europe's broader security framework. In any potential negotiations, Putin is likely to reintroduce the broader security demands presented to the US and NATO in December 2021, alongside his ultimatums on Ukraine. This package represents an effort to mitigate Russia's geopolitical setbacks, particularly Finland and Sweden's accession to NATO. A central demand from the December 2021 proposal was the withdrawal of NATO's military presence to its 1997 boundaries. [...]

Although Russia's approach to the Baltic states has not fundamentally shifted, its perception of threats in the region has grown. Following the onset of war and Finland and Sweden's accession to NATO, Russia's strategic position in the Baltic Sea has weakened and long-term risks have heightened. For Moscow, potential risks such as the blocking of Kaliningrad's access routes and the closure of the Gulf of inland to maritime traffic require preventive actions and the development of possible countermeasures. Avoiding any restrictions on

maritime traffic in the Baltic Sea is economically vital for Russia, as approximately 60% of its oil exports rely on Baltic ports. [...]

Independent think tanks, as understood in the West, with intellectual autonomy or significant influence over public opinion and political decisions on foreign policy do not exist in Russia. All similar Russian entities – whether state-funded research institutions or private think tanks reliant on corporate donations – operate under strict control. Researchers are expected to align with and promote the Kremlin's foreign policy line in their publications, speeches and direct interactions with Western colleagues. Those few dissenters who have dared to criticise official policy, even mildly, have been publicly denounced and removed from their positions. The rest have either left Russia, adapted to the constraints (i.e. accepted censorship) or adopted a more rigidly pro-Kremlin stance than before. [...]

Over the past three years, the role of shadow diplomacy has grown significantly. With official contacts between Russia and representatives of “unfriendly” nations effectively frozen, the Kremlin and its intelligence services have increasingly relied on select Russian experts for discreet communication with Western diplomats and influential think tank members. Through these intermediaries, the Kremlin has deliberately sent misleading signals to Western decision-makers, suggesting either that Putin might be open to concessions in Ukraine or, conversely, issuing veiled threats of imminent nuclear escalation should the West provide Ukraine with excessive support. This nuclear rhetoric is likely intended to stoke fears of escalation among Western policymakers, aided by Russian-aligned experts in the West. [...]

Consideration should also be given to limiting the operational freedom of Russian research institutes in the West. How are Russian think tank representatives, who recite Kremlin or intelligence talking points to their Western contacts as ostensibly independent experts, different from spokespersons for Russian state media? Both exploit Western freedom of speech and spread disinformation. Western nations largely recognise the security risks posed by Russian state media and have significantly curtailed their influence through sanctions. A similar approach should be applied to Russian think tanks operating in the West. [...]

As Russia's oil sector is the primary source of revenue for its war-strained state budget, it is crucial for Moscow to influence global energy prices. To this end, Russia collaborates with Gulf countries, particularly Saudi Arabia, the world's largest oil exporter, within the OPEC+ framework. For Saudi Arabia, shaping the energy market to align with its interests is equally important, as it seeks to implement resource-intensive reforms and projects under the Saudi Vision 2030 initiative, which is aimed at reducing the country's reliance on oil revenues in the long term. As a result, Russia and Saudi Arabia have repeatedly agreed to cut oil production within the OPEC+ framework, though Russia has often violated these agreements

to serve its own interests. Russia's duplicity in this regard has caused significant friction in its relations with Saudi Arabia. [...]

Compared with Saudi Arabia, the UAE is significantly more open to cooperation with Russia. Most of Russia's economic activities in the Gulf region are centred on the UAE, which offers greater business freedom and more opportunities to circumvent sanctions than other Gulf states because, unlike Saudi Arabia, the UAE is less susceptible to US pressure. As a result, thousands of Russian companies, including numerous shell entities involved in the export and re-export of sanctioned goods to Russia, are now registered in the UAE. The UAE also hosts the majority of Russia's shadow fleet, which is used for crude oil exports. Moreover, many wealthy Russians, business figures and oligarchs, such as Roman Abramovich, have relocated to the UAE. The country remains a popular tourist destination for Russian citizens, and its importance as a hub for Russia is underscored by Moscow's reported consideration of acquiring a local airport. [...]

Russia-UAE relations are diverse and close; further expansion is likely and will include various forms of cooperation, both overt and covert, in third countries. [...]

Despite Russia's efforts and more than two years of full-scale war in Ukraine, Moscow has been unable to shift the Western public perception of Russia as an aggressor state or erode Western resolve to continue supporting Ukraine with aid and military assistance. Since cutting off Western support is a key precondition for Russia to subdue Ukraine, the Kremlin has decided to raise the stakes by launching a deliberate campaign of sabotage against Western nations, including Estonia.

This campaign, led by Russian special services, is intended to spread fear and confusion, driving Western nations away from supporting Ukraine. Another objective is to disrupt and dismantle the supply chains delivering military and civilian aid to Ukraine. However, the Kremlin fails to recognise that acts of vandalism, arson and other physical hostility, which pose potential risks to human life, only reinforce Russia's reputation as an aggressor and strengthen further Western unity against Moscow. [...]

Forty years on, Kremlin propagandists are now seeking to revive the nuclear winter theory. Their overarching goal remains the same: to instil[l] fear in Western, particularly American, public opinion and to discourage the provision of (military) aid to Ukraine. [...]

The Kremlin plans to launch a broader campaign that combines television with modern methods and platforms, such as YouTube, podcasts and carefully selected spokespersons with authoritative and "palatable" viewpoints. Their ideal strategy would be to recruit influential American science communicators to champion the nuclear winter theory. Similarly, in the 1980s, prominent Western scientists were enlisted to disseminate the idea,

likely unaware of its KGB origins. According to our information, the Kremlin intended to wait for the outcome of the US presidential elections before fully (re) launching this campaign. [...]

Since Russia launched its full-scale invasion of Ukraine, ideological and media cooperation between China and Russia has become closer and more focused. This cooperation is coordinated at the highest political levels, with particular emphasis on news dissemination. A key goal is to present the war in Ukraine in a pro-Russian light within China's tightly controlled public information space. However, despite the growing alignment and shared worldview between the two countries, China selectively adopts Kremlin propaganda narratives that serve its strategic objectives and disregards those that do not. As a result, the carefully curated narratives about the war circulating in China's tightly controlled information sphere often reveal more about Beijing's true stance than the typically vague and ambiguously worded official statements issued by its leadership. [...]

Occasionally, since the full-scale invasion of Ukraine, Chinese scholars and think-tank experts have published critical analyses of Russia in both Chinese and English. These pieces often aim to distance China from Russia's brutal methods, stressing Beijing's desire to avoid jeopardising the prospect of improved relations with Europe or warning against the risks of deepening dependency on Russian resources. However, such views have no impact on decision-making within the Chinese Communist Party and are primarily designed to mislead external observers about the true nature of China-Russia relations.

To maintain its image as a peace-loving nation, China deliberately obscures its association with Russia's aggression in Ukraine. However, this does not indicate a neutral stance, despite official claims to the contrary. The fact that China frames the war exclusively as a consequence of actions by the US and its allies underscores its lack of impartiality. China will likely continue to take various measures to prevent Russia's defeat, as such an outcome would represent a victory for its primary rival, the US, and a setback to China's efforts to reshape the rules-based international order to favour authoritarian regimes.

China's narratives on the war in Ukraine consistently dismiss Ukraine as a genuinely sovereign nation capable of independent political decision-making, portraying it instead as a pawn in a game of global powers. China's perspective would likely be the same if Estonia were in Ukraine's position. [...]

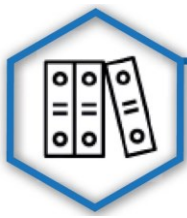
China's technological capabilities remain heavily dependent on the West, prompting President Xi Jinping to prioritise technological self-sufficiency as a strategic goal. However, growing Western resistance to scientific collaboration with China has made international educational and research partnerships especially significant for the CCP, as it works to strengthen Chinese universities' ties with foreign institutions to advance China's innovation and technological development in particular. [...]

Party officials in the Chinese education sector understand that the European Union and other Western research institutions are unlikely to transfer sensitive or valuable information to China willingly. As an alternative, Chinese researchers or doctoral candidates are sent to Western research institutions, or collaborative research labs are established in the target country. Efforts are made to obscure the CCP's involvement in these projects. Chinese students and doctoral candidates' party memberships may be temporarily suspended during their time overseas. [...]

Chinese institutions are generally more reserved than their Western counterparts when sharing data, infrastructure, and research results. This creates an imbalance in collaborative projects.

Researchers participating in Chinese-funded programmes may face loyalty conflicts or pressure to prioritise Chinese interests, raising ethical and security concerns about their affiliations. Furthermore, foreign researchers may feel pressured to avoid sensitive topics – such as China's aggressive foreign policy, human rights, press freedom or its influence campaigns in the West – to preserve their relationships with Chinese institutions or secure funding. This leads to self-censorship and undermines academic integrity. [...]

According to CCP regulations, party members stationed abroad must establish a party cell (*dang zhibu*) with other members. These cells may consist of employees from a single company, but if numbers are insufficient, members from different organisations, such as embassies, research institutions or media outlets, may also be included. [...]



FROM THE ARCHIVE

The need to maintain an effective and credible nuclear deterrent through modernization of the U.S. nuclear weapons complex has generally enjoyed bipartisan support over multiple administrations; yet rapid progress in this area has been notably lacking. A decade ago, the National Institute for Public Policy published a report assessing the ability of the United States to produce new nuclear warheads and detailing numerous recommendations to improve the readiness posture of the nuclear enterprise. Those recommendations remain relevant today. A subsequent National Institute report highlighted significant changes in the international security environment and suggested the need for a more urgent approach to the need for nuclear modernization, refuting arguments in support of a minimal nuclear deterrent, and calling for a more flexible and adaptable U.S. nuclear force to meet growing security challenges. The late John S. Foster Jr. chaired the Senior Review Group for this study, and the Executive Summary reprinted here is but one small example of his leadership and outstanding contributions to U.S. national security. Taken together, these reports identify appropriate considerations for contemporary national security policy makers and demonstrate the enduring importance of sustaining the necessary capabilities to preserve peace and deter aggression in a dangerous world.

DOCUMENT NO. 1.

ASSESSMENT OF U.S. READINESS TO DESIGN, DEVELOP AND PRODUCE NUCLEAR WARHEADS: CURRENT STATUS AND SOME REMEDIAL STEPS¹

Thomas K. Scheber, John R. Harvey

Executive Summary

This report provides an assessment of the U.S. readiness posture to be able to design, develop, and produce new nuclear weapons, in particular the nuclear warheads. The first part of the report focuses primarily on policy-related issues, including the benefits of a healthy nuclear readiness posture, discusses the relevant nuclear weapon policies of three post-Cold War administrations, addresses lessons from an attempt to constrain U.S. nuclear warhead development activities, and summarizes findings of numerous studies of security issues relevant to this topic over the past two decades. The second part of the report addresses technical issues; it characterizes the current state of readiness to develop and produce new nuclear capabilities, identifies existing limitations, and provides recommendations to improve the U.S. nuclear readiness posture.

This report does not advocate any specific new nuclear capability. The focus is on a readiness capability to respond to adverse contingencies and the steps needed to

¹ Thomas K. Scheber, John R. Harvey, *Assessment of U.S. Readiness to Design, Develop and Produce Nuclear Warheads: Current Status and Some Remedial Steps* (Fairfax, VA: National Institute Press, August 2015), available at https://nipp.org/monographs_cpt/assessment-of-u-s-readiness-to-design-develop-and-produce-nuclear-warheads-current-status-and-some-remedial-steps/.



remediate an aspect of the U.S. security posture that, over the past two decades, has been documented repeatedly as being deficient. A healthy nuclear readiness capability would enable the United States to respond to a reliability failure in a nuclear warhead or weapon system type, to an emerging vulnerability as the result of new adversary capabilities, or to presidential direction calling for an increase in the U.S. inventory of weapons.

Why is Sustaining a Nuclear Weapon Development Capability Important?

With multiple and diverse security challenges for the United States and its allies, Department of Defense (DoD) officials have recently expressed alarm at the narrowing U.S. margin of technological superiority in military capabilities vis-à-vis potential adversaries. Former Secretary of Defense Chuck Hagel and current Secretary of Defense Ashton Carter have both called for greater innovation and creativity for defense technologies. Arguably, a military capability sector that clearly demonstrates a shrinking U.S. margin of capability is that of nuclear weapons—the National Nuclear Security Administration (NNSA) capabilities to develop and produce nuclear warheads and the DoD-developed delivery systems that carry those warheads.

Maintaining a readiness capability to develop new weapons or replacements for existing nuclear weapons is fundamentally about reducing risk in the future. Indeed, the 2009 report of the bipartisan Strategic Posture Commission cited the “unpredictable nature of the security environment” as one of the emerging challenges for the United States. Of significant concern was the “profound uncertainty about the future international roles of Russia and China” as well as uncertainty about the future roles of various rising powers. The Commission concluded that the United States needs “to hedge against the possibility that ... these factors might not turn out for the best and that new challenges for the U.S. nuclear strategy might emerge and, indeed, suddenly so.”²

Currently, shortfalls in the U.S. nuclear infrastructure—especially the intellectual infrastructure for warhead research and development—significantly degrade the ability of the United States to respond to challenges that could undermine the deterrence of adversaries and the assurance of allies. Establishing a nuclear weapon readiness program should be a national priority in order to provide resilience for new and unforeseen challenges ahead. The nuclear infrastructure and personnel could be called upon to diagnose and fix an unexpected reliability problem in a warhead type, replace older warheads with similar or different warhead types, increase the number of deployed warheads, or design with different military capabilities. Currently, it is not ready to respond.

² William J. Perry and James R. Schlesinger, et al., *America's Strategic Posture: The Final Report of the Congressional Commission on the Strategic Posture of the United States* (Washington, DC: United States Institute of Peace Press, 2009), p. 8.

A fully functioning and responsive development infrastructure would:

- Improve the credibility of U.S. nuclear capabilities in support of deterrence and assurance;
- Provide enhanced adaptability and resilience for the nuclear force to be able to respond to emerging challenges in a timely manner; and
- Enable the United States to reduce the overall size of the nuclear stockpile. Instead of relying on a large inventory of non-deployed warheads to manage risk and hedge against reliability problems, U.S. leaders would rely more heavily on the infrastructure and skilled workforce to be able to fix warhead problems quickly and, when needed, respond to new security challenges.

Summary of U.S. Post-Cold War Nuclear Weapon Policies and Readiness Posture

The administrations of President William J. Clinton and President George W. Bush agreed on the explicit policy of maintaining the ability to design and produce new nuclear warheads and weapons, when required. [...]

Maintaining a resilient nuclear capability was characterized by both administrations as a “hedge” against future uncertainties. Both administrations stated this requirement periodically and reflected this priority in their programmatic initiatives.

In its 2010 NPR, the Obama administration assigned highest priority to nuclear nonproliferation and reducing the role of nuclear weapons in U.S. national security strategy. The administration also promoted the vision of a nuclear-free world. At the same time, President Obama committed to sustain the reliability of nuclear warheads as long as those weapons are needed and to enhance safety and security features for nuclear weapons. The requirement to maintain a capability to develop and field modern warheads, or modify warheads to provide new military capabilities is implicit in President Obama’s commitment to sustain the nuclear stockpile. In a 24 May 2010 letter from Vice President Joseph Biden to Senators Kyl and Lieberman, Biden stated:

Admiral Mullen and General Kevin Chilton, Commander, U.S. Strategic Command, have stated that the current deterrence requirements are met with existing weapons systems capabilities. They have made clear that there is no military requirement for new warheads or new military capabilities—and equally clear that they and their successors would be obligated to state if they believed such a requirement arises in the future.³

Bottom line: Notwithstanding the fact that programmatic goals for nuclear capabilities have from time to time been scaled back to conform to fiscal limits and extant congressional support, the long-term goal of a healthy nuclear weapon development and production posture has been supported—explicitly or implicitly—by the current and previous two

³ Letter from Vice President Joseph Biden to Senator Jon Kyl and Senator Joseph Lieberman, 24 May 2010. (Emphasis added.)

administrations. Over the past two decades, however, U.S. capabilities to design, develop, and field modern nuclear warheads have not been exercised and, as a result, have deteriorated.

Numerous Studies over the Past Two Decades Cite the Need for Improved U.S. Readiness Capabilities for Nuclear Weapons

Over the past two decades, many studies of the U.S. nuclear readiness posture confirm the atrophy of nuclear skills in the United States. These studies include assessments conducted by the bipartisan Strategic Posture Commission, other congressionally-mandated studies and commissions, the National Research Council, and the Defense Science Board. The consistency of the findings on capability limitations is striking and includes the following:

- Important NNSA nuclear warhead development skills are not being exercised;
- DoD nuclear expertise is declining;
- Improvement is needed in NNSA-DoD coordination and integration; and
- Nuclear warhead production facilities are outdated and inefficient; some are decrepit.

Studies and reports over the past 20 years also provide consistent recommendations to remediate this situation.

Limitations of the Current U.S. Nuclear Weapons Enterprise

The finding that significant limitations exist in the current nuclear readiness posture is reaffirmed by recent interviews with former senior officials who served in the DoD, NNSA, or at national laboratories. Specific limitations include:

- **No Comprehensive Approach Exists to Sustaining Nuclear Readiness.** The current approach to sustaining critical nuclear skills is piecemeal. A comprehensive approach to improving and sustaining a nuclear warhead readiness and response capability is needed.
- **Not All Critical Skills and Capabilities Are Being Exercised.** Currently, the approach for life-extending warheads calls for options to either *refurbish* existing warheads, to *reuse* nuclear components from warhead designs previously in the stockpile, or to *replace* warheads or the nuclear components with previously tested designs. However, most warhead life extension programs (LEPs) today are of limited scope—primarily *refurbishment* LEPs—which exercise only a limited set of critical skills for nuclear warhead development and production. One study called the current approach “unsustainable.”
- **Lack of Balance between Computation and Experiments.** Currently, the nuclear warhead development community is overly dependent on computer simulation. As one designer has stated, “The codes always lie.” Without sufficient experimental

activities against which to test the results of computer simulations, new designers and engineers may not recognize where the computer codes break down and why. This over-dependence on computer simulation impedes the development of professional judgment that will be needed in the future when facing complex design challenges.

- **Infrastructure Modernization Delayed Repeatedly.** Modernization of critical nuclear facilities has been delayed. The U.S. nuclear infrastructure has not been fully operational for a quarter century. A September 2008 white paper signed jointly by Secretary of Defense Robert Gates and Secretary of Energy Samuel Bodman states, "...the United States is now the only nuclear weapon state party to the NPT that does not have the capability to produce a new nuclear warhead."⁴ In its 2009 report, the bipartisan Strategic Posture Commission stated that some facilities are "genuinely decrepit" and much still remains to be done to put in place a modern nuclear weapon infrastructure to serve national security goals for the long term.⁵ In addition, infrastructure modernization plans may not adequately address the need for reserve capacity to respond to unforeseen needs. Nearly all of the planned capacity to produce warheads over the next 25 years will be tied up with the life extension programs needed to sustain the existing stockpile. There is little, if any, margin left for unplanned tasks. As a result, the United States plans to maintain a larger stockpile of reserve warheads than desired in order to manage risk and provide options to respond to contingencies.

Recommendations to Improve the Readiness Posture of the Current Nuclear Enterprise

This report identifies several near-term actions that would help the United States to strengthen and maintain nuclear warhead development capabilities, including scientific and technical personnel, experimental capabilities, and manufacturing infrastructure needed to—if directed by the president—develop and field new or modified warheads.

A Bipartisan, Long-Term Commitment to a Resilient Nuclear Readiness Posture is Needed. Above all else, it is essential to restore a bipartisan consensus that supports maintaining a resilient nuclear weapons development and production capability, and routinely demonstrating that capability. Periodically communicating continued U.S. nuclear competency and the message that this is important to our nation is a critical component of deterrence and assurance. Bipartisan support in Congress and a dedicated partnership

⁴ Secretary of Defense Robert M. Gates and Secretary of Energy Samuel W. Bodman, "National Security and Nuclear Weapons in the 21st Century," September 2008, p. 19. (Unclassified report which was an edited and redacted version of a classified report sent to Congress in February 2008.)

⁵ Perry and Schlesinger, et al., *America's Strategic Posture: The Final Report of the Congressional Commission on the Strategic Posture of the United States*, op. cit., pp. 47-51.

between the executive branch and Congress will be imperative to achieve this long-term goal.

Recommendation: Make explicit, as national policy, the national security goal of maintaining a resilient nuclear weapon development and production capability and exercising that capability periodically. This would demonstrate continued U.S. nuclear competency for both potential adversaries and allies. Bipartisan support in Congress will be imperative for this to succeed.

The People: Ensuring Weapons Design and Engineering Development Skills for the Long Term. It is fundamental in nuclear weapons work, as it is in other highly technical activities, that the skilled people—the scientists, designers, and engineers—will be unable to maintain critical capabilities absent opportunities to exercise them routinely on complex warhead design and development challenges. Over the past two decades, such opportunities have been few and far between.

At present, there are no military requirements for new warheads or for warheads with new military capabilities. How then can all critical skills be exercised? A more comprehensive approach is needed—one that exercises the entire design, development and manufacturing enterprise and advances a modern warhead design from initial concept through prototype development and flight testing to the point where one or a few are built, but not fielded.

In generating modern warhead designs, weapons scientists, working with their military counterparts, have traditionally conducted a Phase 1 warhead concept study leading to a Phase 2 feasibility and cost study. These are generally paper studies and, while important, do not fully exercise critical skills.

To maximize benefit for skill development, work must include at least parts of Phase 3 engineering development and Phase 4 production engineering associated with building and integrating actual hardware. The benefits of training young weapons scientists on innovative design problems would be compounded in value when the designer must iterate his/her work with systems engineers—in both NNSA and DoD—to weaponize a warhead design and with the production personnel who would actually have to build the prototype warhead.

One near-term action to more fully exercise skills involves restoring the original schedule for a LEP for one “common” warhead which would replace two aging warheads—one carried on intercontinental ballistic missiles, the other on submarine-launched ballistic missiles. (The proposed common-use warhead is referred to as the Interoperable Warhead-1 or IW1). Compared to other LEPs underway, the IW1 LEP presents a much more formidable design and development challenge for training a new generation of developers and would exercise a broader range of skills.

Recommendations: Actions that would help retain and advance needed skills and capabilities into the future for nuclear warhead design and engineering personnel include the following.

- Reverse the recent five-year delay to the IW1 LEP program in order to begin providing young weapons scientists and engineers a timely, important and complex design and development challenge.
- Accelerate activities, already underway, to certify, without nuclear testing, the safety and reliability of an older warhead primary that is modified with insensitive high explosives.
- Explore opportunities to introduce into future LEPs warhead features that facilitate ease of maintenance, enhanced surety, and certification without nuclear testing.
- Increase opportunities to train nuclear designers via the design and manufacture of a few prototype warheads, including warhead designs in ongoing programs to assess foreign nuclear weapon designs as called for in the 2015 National Defense Authorization Act (NDAA).⁶ Here, a modern warhead design would be taken from initial concept and paper studies through prototype development and flight testing. One or a few would be built, but not fielded.
- As part of nuclear counterterrorism efforts, increase opportunities for young designers to explore potential improvised nuclear device designs and means to render them safe.
- Fund a small program to enable designers to spend part of their time in “blue sky” thinking about what might be achievable in nuclear weapon technology. To help motivate innovation, this should be competitive in nature and challenge young designers and engineers at the two U.S. nuclear design laboratories to propose creative concepts.

Increase Use of Experiments with Advanced Diagnostics to Complement Computer Simulation. The challenge of training weapons designers and engineers has evolved due to the absence of nuclear testing and availability of new, extraordinarily powerful computing capabilities. More so than their predecessors, young designers rely more heavily on computer simulation, modeling, and calculations and tend toward overconfidence in the quality of the weapon physics embedded in the codes. One senior designer noted that “the codes always lie” and the job of the designer is to figure out where they can be wrong and when. A more balanced Stockpile Stewardship Program would include computer simulations and modeling backed up by a more comprehensive experimental program. The

⁶ The FY 2015 National Defense Authorization Act (NDAA)—*Section 3111. Design and Use of Prototypes for Intelligence Purposes*—reflects an implicit recognition of some of these issues. Section 3111 authorizes the national labs to “design and build prototypes of nuclear weapons to further intelligence estimates with respect to foreign nuclear weapons activities and capabilities.”

weapon physics models in the computer codes would be compared to experimental results in various warhead design configurations.

Indeed, the United States has developed modern experimental facilities with advanced diagnostics to conduct experiments that not only greatly advance the state of our knowledge about weapons physics and chemistry but can be used to test designer judgment as well. However, other priorities and, to a lesser extent, funding shortfalls have prevented young scientists from fully exploiting these facilities to conduct experiments to test their calculations. These facilities are not being fully utilized.

Recommendations: Actions to expand the use of experimental programs for training a new generation of stockpile stewards include the following.

- More fully utilize existing experimental facilities. Given that tight budgets are a fact of life, seek “more bang for the experimental buck” by: (1) assigning a higher priority to experiments; (2) operating more efficiently by reducing bureaucratic overhead and micromanagement that increases costs; and (3) *managing safety risks* rather than fruitlessly (and at high cost) seeking to eliminate them.
- Provide young weapon designers at Los Alamos National Laboratory more opportunities to exploit experiments at high energy density facilities in their training and later warhead design work. (Note: Such facilities are not located at Los Alamos.)
- Challenge young designers with “out of the stockpile box” problems and the opportunity for innovative experiments to test judgment. Challenge young weapons scientists to brief their predictions—perhaps in a lab-to-lab competitive environment—on the expected results of experiments before they are carried out. This so-called “pre-mortem” process would offer the potential for failure and, thus, would be valuable for building judgment.

Accelerate Infrastructure Modernization. A functioning and responsive nuclear warhead manufacturing infrastructure is essential to any plausible strategy to respond to unforeseen contingencies and is also an important component of efforts to train the next generation of warhead development personnel. The infrastructure problem (along with the deterioration of skills) has existed for more than two decades. This is not a problem caused solely by this administration or this Congress, but also by administrations and congresses before them.

The aging, inefficient infrastructure has caused stockpile LEPs to be more expensive and to take longer than would have been otherwise possible. For example, the W87 LEP, carried out in the late 1990’s and early 2000’s, was more expensive and took 15 years—much longer than anticipated—because of the need to restore capabilities for warhead secondary work at the Y-12 plant in Oak Ridge, Tennessee. Also, difficulty in restoring a lost capability to produce a special material called Fogbank delayed completion of the W76-1 LEP by several years.

Recommendations: Steps for modernizing the physical infrastructure are straightforward.

- Accelerate efforts to provide a capability to produce plutonium pits at a capacity of 50-80 pits per year at Los Alamos, New Mexico.
- Implement the revised approach identified by NNSA's Red Team⁷ to restore safe and environmentally sound highly-enriched uranium component manufacturing capabilities at the Y-12 plant in Oak Ridge, Tennessee. [...]

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DOCUMENT NO. 2. A NEW NUCLEAR REVIEW FOR A NEW AGE⁸

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Executive Summary

One of President Donald Trump's first actions after entering office was to direct Secretary of Defense James Mattis to "initiate a new Nuclear Posture Review to ensure that the United States nuclear deterrent is modern, robust, flexible, resilient, ready and appropriately tailored to deter 21st-century threats and reassure our allies."⁹ Secretary Mattis has since reportedly directed that the new Nuclear Posture Review (NPR) be completed in six months.¹⁰ This new 2017 NPR will be the fourth in a series, following the 1994, 2001, and 2010 NPRs.

⁷ Thom Mason, committee chair, Final Report of the Committee to Recommend Alternatives to the Uranium Processing Facility Plan in Meeting the Nation's Enriched Uranium Strategy (Oak Ridge, TN: Oak Ridge National Laboratory, April 15, 2014), available at http://www.lasg.org/UPF/UPF_Red_team_rpt_15Apr2014.pdf.

⁸ Keith B. Payne and John S. Foster Jr., et al., *A New Nuclear Review for a New Age* (Fairfax, VA: National Institute Press, April 2017), available at https://nipp.org/monographs_cpt/a-new-nuclear-review-for-a-new-age/.

⁹ Donald Trump, "Presidential Memorandum on Rebuilding the U.S. Armed Forces," *WhiteHouse.gov*, January 27, 2017, available at <https://www.whitehouse.gov/the-press-office/2017/01/27/presidential-memorandum-rebuilding-us-armed-forces>.

¹⁰ Rachael Karas, "Air Force nuclear chief: Mattis wants nuclear review completed within six months," *Inside Defense*, March 29, 2017, available at <https://insidedefense.com/daily-news/air-force-nuclear-chief-mattis-wants-nuclear-review-completed-within-six-months>.

This report—entitled *A New Nuclear Review for a New Age*—examines major questions and issues for consideration in the new NPR.

The forthcoming NPR will supersede its immediate predecessor, completed in 2010 under the Administration of President Barack Obama. Previous NPRs were issued in 1994 and 2001 to guide nuclear policy under the Clinton and Bush Administrations, respectively. Since the 2010 NPR, the global security environment has changed significantly. Existing US nuclear weapons and delivery systems have aged while potential adversaries have modernized their arsenals. The attitudes and perceived options of US allies in many cases are different as well. Taken together, these and other changes highlight the high priority of the new NPR and the need for well-informed discussions leading to new guidance.

This report examines the international security environment, goals of nuclear policy, technology issues, funding questions, the precedents set by earlier NPRs, the relevance of nuclear declarations and arms control efforts, and other key inputs, and offers recommendations for consideration in the forthcoming NPR.

This Executive Summary is organized according to the chapters in this report.

Security Environment

The world as seen from the United States looks very different today—and much more threatening—than it did at the time of the last NPR in 2010. Therefore, a new review of US nuclear policy and requirements must begin with a realistic assessment of the security environment and the challenges it poses.

The four countries whose leaderships and doctrines continue to be of greatest importance to US nuclear policy are the Russian Federation, the People's Republic of China (PRC), the Democratic People's Republic of Korea (DPRK), and the Islamic Republic of Iran. In addition, the potential terrorist-style actions of belligerent non-state actors continue to be of major concern. Each is considered in turn.

Russia. Long-standing US hopes for more constructive relations with Russia—which date to the collapse of the Soviet Union in 1991 and informed all three previous NPRs—have been dashed in recent years. President Vladimir Putin's regime in Moscow appears to be driven by the goal of re-establishing Russian hegemony in the former "Soviet space." In 2008, Russia invaded Georgia and since has effectively absorbed parts of Georgian territory. Russia's illegal 2014 occupation and subsequent annexation of Crimea, along with its ongoing military involvement in Eastern Ukraine, constitute fundamental challenges to the post-Cold War European peace. More recently, Russia intervened in the Syrian civil war in support of Syrian President Bashar al-Assad, and reportedly was aware in advance of Assad's deadly April 2017 use of chemical weapons against Syrian civilians. President Putin has stoked imperial nationalism at home, probably to draw attention away from domestic challenges and generate ongoing popular support for his regime's expansionist agenda.

Putin and his small inner circle—poised to continue controlling Russian defense and foreign policy for years to come—are inherently anti-Western and have named the United States and the North Atlantic Treaty Organization (NATO) as priority threats. Potential flashpoints between Russia and NATO span Eastern Europe and certainly include the Baltic states as well as the Middle East.

Russian leaders now appear to consider their country's nuclear capability as an enabler of expansionist regional actions. Developments in Russian doctrine elevate the potential role of nuclear weapons. Most ominously, reports indicate that Russia has developed an "escalate-to-win" approach that includes threats of nuclear first use and apparent planning for nuclear first use in regional conflicts—to demonstrate the extreme risks of Western resistance to Russian geopolitical gains.

Russia has put highest priority on modernizing strategic and non-strategic nuclear capabilities for the past decade—announcing more than 20 programs to develop and deploy new strategic nuclear systems or modernize Soviet legacy systems. These include multiple systems for every leg of the Russian nuclear triad as well as two possible systems extending beyond the triad: a hypersonic glide vehicle and a nuclear-armed and powered undersea delivery vehicle. These Russian developments pose unprecedented challenges to Western deterrence and assurance goals.

China. The Chinese Communist Party (CCP) under the leadership since 2012 of President Xi Jinping, asserts central control of Chinese national security and foreign policy. In recent years, while remaining an important US economic partner, China has redoubled its efforts to achieve hegemony in Asia and, correspondingly, continued its military buildup, including nuclear. China has made claims to nearly the entire South China Sea, in violation of international law and tribunal rulings—and even has disputed Japanese sovereignty over the island of Okinawa, where US military personnel remain stationed.

The precise size and nature of China's nuclear arsenal—like its nuclear doctrine—remain opaque. China certainly controls at least several hundred nuclear weapons—both strategic and theatre missiles—and is committed to nuclear modernization, including a new ballistic-missile submarine and a new generation of strategic bombers.

Official Chinese declaratory policy includes a no-first-use nuclear policy emphasizing the ability to survive a nuclear attack and respond with unacceptable damage on an enemy. However, there are considerable doubts about the reality of this expressed Chinese commitment to no first use; many analysts tend to believe that China's actual policies are more flexible.

North Korea. Post-Cold War hopes that the DPRK would collapse peacefully or slowly reform have not been realized. North Korea defies UN resolutions and international sanctions openly, with provocative military behavior and threatening rhetoric, including nuclear threats. North Korea's continued development of nuclear weapons and long-range ballistic missiles—linked to its overarching goals of regime preservation and unifying the

Korean peninsula under its control—place the regime in fundamental opposition to US and allied interests in the Pacific.

Under the solidified leadership of Kim Jong Un—the third in his family to control the country—North Korea’s nuclear forces appear to be increasing both in quantity and quality. The DPRK has tested a nuclear device five times in recent years and, while open estimates vary, the country may have enough fissile material to produce 50-100 weapons by 2020. It also remains committed to developing long-range missiles capable of reaching US territory.

Officially, North Korea claims that its nuclear capability is meant for defensive or retaliatory purposes, but its explicit nuclear threats appear to reflect hostile intent, and little is known with certainty about how the DPRK’s leaders might employ nuclear weapons. Certainly the regime continues to leverage its nuclear program for coercive diplomacy and to bolster its international standing.

Iran. Since the 2010 NPR, Iran has expanded its disruptive actions in the Middle East, including provocations against the United States, and continues to support terrorist organizations as well as the Assad regime in Syria. Iran’s theocratic regime—centered since 1989 on Supreme Leader Ali Khamenei—remains in firm control.

Despite the Joint Comprehensive Plan of Action (JCPOA), Iran retains the potential to become a nuclear power in relatively short order. The JCPOA does not limit potential nuclear delivery vehicles such as missiles, and Iran reportedly continues to invest heavily in their development. Its recent satellite launches suggest that long-range missile development remains part of these efforts as well. Technology sharing between North Korea and Iran also is of great concern.

Non-state actors. Open-source reports indicate that terrorist groups so far have been unsuccessful in obtaining a nuclear weapon or the materials needed to assemble one. Should this change, however, the threat to the United States and its allies could be immense and immediate—and so this possibility must remain a high priority in US nuclear thinking.

Summary conclusion. The expectation of a more benign nuclear threat environment embedded in previous nuclear reviews—an environment in which nuclear weapons and nuclear deterrence were expected to play ever-diminishing roles—has faded from view and should *not* serve as a planning assumption for the new NPR.

Purposes of US Nuclear Capabilities

The general purposes of US nuclear capabilities—and therefore the goals of nuclear policies—have been remarkably consistent over time and certainly since the first NPR in 1994. Three purposes are of particular importance: the *deterrence* of enemies, the *assurance* of allies, and *defense* or *damage limitation* in the event of war. In addition,

nuclear *nonproliferation* has taken on increasing prominence and indeed was identified as a top priority in the 2010 NPR. It is important to understand the ongoing salience of each of these purposes.

Deterrence. Defined by the US Department of Defense (DoD) as “the prevention of action by the existence of a credible threat of unacceptable counteraction and/or belief that the cost of action outweighs the perceived benefits,” deterrence has been a central purpose of US nuclear policy and capabilities. Going back to the 1948-49 Berlin crises and the 1962 Cuban Missile Crisis, considerable evidence exists that nuclear deterrence helps uniquely to prevent war or the escalation of conflict between countries. And even with regard to non-state actors, deterrence can help to dissuade adversary countries from providing technical or material assistance to dangerous groups.

In a highly-dynamic threat environment, to the extent possible, US deterrence policies must also be highly adaptable: capable of being “tailored” to the various requirements posed by a shifting spectrum of opponents and contingencies. Such adaptability, in turn, rests on the availability of a flexible nuclear-force posture that provides US presidents with a range of deterrent options that not only deter, but also could help limit damage to civilian populations and society in the event deterrence fails.

Assurance. While the primary audience for US deterrence messages are adversaries, nuclear assurance addresses itself to allies and partners—by creating or reinforcing confidence among them regarding the US ability and will to help preserve their security against external threats. The United States extends nuclear assurance commitments to more than 30 countries, particularly in Europe and Northeast Asia, where US nuclear policy provides confidence to allies that their security does not require their development of independent nuclear arsenals.

As with deterrence, assurance depends not only on the credibility of the US commitment but also on the flexibility of available options. While some allies may have doubts that the United States would risk all-out strategic nuclear war involving the American homeland to defend their territory, sub-strategic US nuclear and non-nuclear capabilities deployed in their vicinity can help provide important assurance effect.

Damage limitation. In the event that deterrence fails, damage limitation continues to be a US policy priority reinforced by nuclear capabilities. Numerous official policy documents in the past have identified damage limitation as a priority US goal, and the Obama Administration’s 2013 *Report on Nuclear Employment Strategy of the United States* implicitly identifies it as such.

A potential means of limiting damage is so-called “intra-war deterrence,” in which the priority goal during an ongoing conflict is to reestablish deterrence and thereby minimize escalation and damage to US and allied military, political, and societal assets. While reestablishing deterrence following initial conflict can never be considered a certain

outcome, it is most likely to be achieved if the United States has a range of limited nuclear and non-nuclear options at its disposal that can provide a response scaled to any level of attack. Active defenses, such as ballistic missile and air defenses, also may contribute to the goal of damage limitation.

Nonproliferation. Nonproliferation—preventing the adoption of nuclear weapons by additional countries or a numerical increase in the number of nuclear weapons—remains a vital goal. Proponents of using further US nuclear reductions and limitations to promote nonproliferation argue that US nuclear-force reductions contribute to decisions of other countries to forego nuclear weapons or to more seriously pursue nonproliferation. Yet, there is little to no evidence that supports this widely-claimed linkage; there is, however, considerable evidence (discussed later in this report) indicating that credible US nuclear capabilities contribute to the assurance of allies and thus to the goal of nonproliferation.

Summary conclusion. The 2010 NPR explicitly elevated nonproliferation “for the first time” to the highest priority of US nuclear policy, among other priorities, including deterrence and assurance.¹¹ It also identified a reduction in the roles and number of nuclear weapons as a means to promote its priority nonproliferation goal. Senior DoD officials identified “preventing nuclear proliferation and nuclear terrorism,” and “reducing the role of nuclear weapons in US strategy” as the top US strategic objectives, and stated explicitly that the Department of Defense assessed “deterrence requirements against these metrics.”¹² Correspondingly, then-Secretary of State Hillary Clinton said, “As part of the NPR, the Nuclear Posture Review, we are grappling with key questions... Will our deterrence posture help the United States encourage others to reduce their arsenals and advance our nonproliferation agenda? [And] How can we provide reassurance to our allies in a manner that reinforces our nonproliferation objectives?”¹³

There is now something of a consensus in Washington regarding the deterioration of the security environment since 2010, and senior DoD officials accordingly have identified US nuclear deterrence as the Department’s “highest priority mission.”¹⁴ The 2017 NPR should explicitly reestablish deterrence and assurance—coupled with preparations for damage limitation in the event of deterrence failure—as the priority goals for US nuclear

¹¹ U.S. Department of Defense, *Nuclear Posture Review Report* (Washington, DC: Department of Defense, April 2010), p. vi, available at

https://www.defense.gov/Portals/1/features/defenseReviews/NPR/2010_Nuclear_Posture_Review_Report.pdf.

¹² James Miller, Principal Deputy Under Secretary of Defense for Policy, as quoted in U.S. Congress, “The Current Status and Future Direction for U.S. Nuclear Weapons Policy and Posture,” *112th U.S. Congress*, House Armed Services Committee, November 2, 2011, p. 62, available at https://fas.org/irp/congress/2011_hr/nw-posture.pdf.

¹³ Hillary Clinton, “Remarks at the United States Institute of Peace,” *State.gov*, October 21, 2009, available at <https://2009-2017.state.gov/secretary/20092013clinton/rm/2009a/10/130806.htm>.

¹⁴ Ashton Carter, “Remarks by Secretary Carter to troops at Minot Air Force Base, North Dakota,” *Defense.gov*, September 26, 2016, available at <https://www.defense.gov/News/Transcripts/Transcript-View/Article/956079/remarks-by-secretary-carter-to-troops-at-minot-air-force-base-north-dakota/>.

policy. Nonproliferation remains important, but the emphasis on it as the priority goal “atop” US nuclear policy, and the corresponding prioritization accorded to the continuing reduction of US nuclear forces, should not be sustained. The realities of the contemporary threat environment and the corresponding prioritization of credible deterrence, assurance, and damage limitation goals are key factors for consideration in the new Nuclear Posture Review mandated by the Trump Administration.¹⁵ This alone is no small difference from the dominant post-Cold War nuclear policy narrative which has sought largely to limit and reduce US nuclear capabilities on a continuing and progressive basis.

Defining Adaptability

The current security environment, the purposes of US nuclear capabilities in response to that environment, and the reality of lengthy acquisition cycles for new weapons systems, combine to make *adaptability* an essential metric for US planning and nuclear capabilities supporting deterrence, assurance, and damage limitation.

Adaptability, as understood in this report, encompasses *flexibility* to adjust to different adversaries, contingencies, and employment plans, as well as *resilience*, which allows national leaders to adjust the force posture in response to adverse military, political, or technological changes.

In practice, several nuclear-force posture attributes reinforce flexibility and resilience. These include survivability (the ability of nuclear forces to withstand or escape attack); suitable range; ability to forward deploy (closer to adversaries and allies alike); prompt response capability; variable payloads (e.g., the ability of ballistic missiles and bombers to carry different types and numbers of weapons); assorted weapon yields; and high delivery accuracy.

In addition, several other factors enhance the resilience of the US nuclear force posture. The diversity and readiness of the existing force structure is a key factor, for example, including its “triad” of land-based, sea-based, and airborne delivery systems. The ability to adjust the size and alert levels of the deployed force—by bringing weapons out of stockpile if necessary, for example—is important as well. And, the potential to modify existing capabilities through straightforward hardware changes also can enhance adaptability.

Summary conclusion. Adaptability in general should be made a guiding metric for the evaluation of US nuclear policy, planning, and force structure; its preservation and enhancement in these elements should be a primary theme in the 2017 NPR.

¹⁵ The White House, “Presidential Memorandum on Rebuilding the U.S. Armed Forces,” *WhiteHouse.gov*, January 27, 2017, available at <https://www.whitehouse.gov/the-press-office/2017/01/27/presidential-memorandum-rebuilding-us-armed-forces>.

Considering US Nuclear Force Size: How Much Is Enough?

The size of a future US nuclear force is likely to be a key consideration in the forthcoming NPR. The specification of “how much is enough” in terms of nuclear force numbers has been an enduring question addressed in previous NPRs. A “minimalist” school of thought has long argued for no more than the force size necessary for a retaliatory threat to an opponent’s society, in response to an attack by that opponent. Such a threat is said to be adequate for US deterrence requirements while demanding a relatively small number of US nuclear weapons—typically ranging from a few dozen weapons to hundreds.

This report identifies a number of reasons to reject the minimalist approach to answering the question of US nuclear force sizing:

1. Declaring a low specific number of weapons as adequate for US deterrence needs because it meets the requirements to threaten an opponent’s society reflects a basic misconception of deterrence. No one can know the “minimal” number of nuclear weapons necessary to deter credibly; and even if known, the number likely would change on a continuous basis due to shifts in force structure, weapons technology, the opponent’s worldview, the stakes of the conflict, context, and numerous other factors. This is the reason deterrence strategies must be sufficiently flexible to be “tailored” to specific contexts, not predicated on a static minimalist concept.
2. A minimal number of weapons may not be sufficiently large and diverse to discourage first-strike strategies and planning by a determined opponent. The consensus of Democratic and Republican administrations for 50 years has been to maintain a diverse and, in some ways, overlapping triad of strategic nuclear forces to ensure the survivability of US forces, as is necessary for deterrence, and thus to discourage opponents from considering first-strike strategies, and to preserve credible deterrence even in the face of an opponent pursuing such a strategy.
3. The minimalist focus on threats to civilians and other societal targets as the measure of effective US deterrence capabilities is widely considered immoral, a violation of international law, and likely to be viewed as an incredible US deterrent by some opponents.
4. A minimal force number oriented to threatening societal destruction would provide little flexibility to hold at risk other assets that an opponent’s leadership might value more than civilian centers—such as military or political control targets. Thus, such a minimal deterrent could be inadequate and an imprudent approach to deterrence and assurance.
5. A minimal force would provide a future US president the most miserable option if deterrence fails—that of responding against an opponent’s society with remaining forces—at the expense of other targeting options that could more likely help limit escalation of the conflict and avoid further counter-strikes from the opponent.

6. A minimal nuclear force needed to threaten society likely would be seen as wholly insufficient for assurance by at least some allies under the US nuclear umbrella.

Summary conclusion. The US goal must be for nuclear deterrence and assurance to work as effectively as possible in all cases, and to limit escalation to the extent possible should deterrence fail. This demands the rejection of a minimalist approach. In the forthcoming NPR, recommendations regarding US nuclear force numbers should *not* aim for a hypothetical minimum derived from only the requirements for holding societal targets at risk, fixed budget numbers, or other static boundaries. The standards of adequacy for multiple nuclear policy goals in severe, diverse and shifting conditions can never realistically be considered fixed. Instead, numbers should be the product of a careful assessment of the dynamic security environment and US purposes within it.

Present and Planned US Nuclear Forces

The United States is in the initial stage of a planned nuclear-force modernization program. The program will encompass all elements of the force, require a budget of hundreds of billions of dollars over the next quarter century, and affect US capabilities for deterrence, assurance, and damage limitation for decades after its completion. This report outlines key components of present and planned US nuclear forces, and evaluates the changes expected from the modernization program against the metrics of adaptability described in the earlier section on that topic. (See the extensive supporting open references for this discussion in Appendix A). The report also considers aspects of technology development and the nuclear-weapons infrastructure that are in need of modernization.

For purposes of this Executive Summary, the potential impacts of key force changes are summarized with reference to the adaptability criteria:

Survivability. Force survivability is a matter both of escaping or withstanding attack (pre-launch survivability) and penetrating defenses that could impede an effective response (post-launch survivability). The force-modernization program, as reported, will not change the survivability level of US ballistic missile submarines (SSBNs) in port. Nor will it change the survivability of bombers and dual-capable aircraft (DCA) at air bases, or intercontinental ballistic missiles (ICBMs) in silos. The *Columbia*-class SSBN, however, is designed for greater *at-sea* survivability than its *Ohio*-class predecessor. The B-21 bomber, long-range standoff missile (LRSO), and F-35A DCA are all designed for greater post-launch survivability against advanced air defenses than their existing counterparts. And the planned ground-based strategic deterrent (GBSD) missiles are expected to be more survivable after launch than the existing Minuteman III.

Suitable range. Current submarine-launched ballistic missiles (SLBMs), ICBMs, and bombers have intercontinental ranges and—while the ranges of next-generation systems have not been revealed publicly—it is reasonable to expect that their ranges will be

similarly intercontinental. In the same way, the LRSO may be expected to have an intermediate range comparable to the current air-launched cruise missile (ALCM-B) and retired Advanced Cruise Missile. DCA typically have shorter ranges than bombers—and open-source estimates suggest the F-35A will be no exception—but can be forward deployed and refueled in flight to extend range.

Ability to forward deploy. Bombers and SSBNs are the forward-deployable legs of the US nuclear triad—and DCA can assume forward-deployment duties as well. Historically, both bombers and submarines have been sent abroad on visible “presence” missions to deter foes and assure friends. Other than possible concerns about their security in foreign locations or the revelation of their design elements, nothing would argue against the use of next-generation systems in similar ways. And, of course, the F-35A strike fighter should be entirely capable of assuming its predecessors’ forward-deployment roles.

Prompt response capability. Prompt response involves the ability to reach targets from long range in minutes rather than hours. As reported, this capability certainly will be sustained in next-generation ICBM and SLBM systems expected under the modernization program.

Variable payloads. Today, SLBMs and ICBMs are capable of carrying two types of reentry-vehicle warheads. Follow-on missiles envisioned in the modernization program could carry as many as three warhead types. The future bomber force, as reported, will continue to carry cruise missiles—LRSO missiles in place of ALCM-Bs—but there will be fewer types of gravity bombs as most variants of the B61 bomb are retired. The future bomber force also will retain significant “uploading” capacity—to take on additional warheads and bombs if conditions warrant.

Assorted weapon yields. This aspect of adaptability also will not change significantly, with future SLBMs and ICBMs reportedly still being armed with warheads of high (reportedly hundreds of kilotons or more) yield, while bombers reportedly will carry weapons of both high and low yields.

High delivery accuracy. Though improvements in the next generation seem likely, current SLBMs and ICBMs already boast accuracy reported to be within a few hundred feet of their intended targets. The modernization program is likely to impact the delivery accuracy of gravity bombs in a future force, since the follow-on B61-12 gravity weapon includes a guided tail-kit section designed to improve accuracy, as reported.

Technology development and rebuilding infrastructure. Beyond the replacement of aging weapons systems themselves—as planned in the modernization program—the United States also must grapple with the need to maintain and, in some cases, restart

technology-development efforts surrounding our nuclear forces and to rebuild necessary infrastructure.

Examples of technologies in which the United States may face the choice between competing or losing key competencies to adversaries include anti-ballistic missile defenses, cruise-missile technology and hypersonic delivery vehicles, space-control capabilities, non-nuclear offensive technologies such as railguns and lasers, and command-and-control systems.

In addition, as US production of nuclear weapons in recent decades has ceased, the larger intellectual infrastructure needed to design, manufacture, and produce nuclear systems also has atrophied—creating what a growing number of observers believe are risky gaps between US capabilities and those of adversaries whose nuclear-technology programs continued apace. The US nuclear-weapons stockpile today is the smallest since the Eisenhower Administration, and a comprehensive approach to sustaining overall nuclear readiness does not appear to exist. Addressing these areas of need will contribute to overall US flexibility and resilience.

The report also finds that accelerating replacement of the two critical US nuclear-material production facilities should be an urgent priority. The United States reportedly has not had a fully operational plutonium or uranium production complex since 1989.

Finally, US nuclear command, control, and communications (NC3) systems—including early-warning sensors, mobile and fixed command-and-control centers, and communications links between deployed nuclear forces and national leaders—remain in urgent need of modernization.

Summary conclusion. The existing US nuclear modernization program is critical to sustaining the adaptability of US nuclear forces needed to support the priority national goals of deterrence, assurance and damage limitation. The greatest virtue of the planned modernization program in this regard will be to preserve the flexibility and resilience inherent in the US nuclear triad for decades to come—as production lines reopen and new systems replace those whose practical lifespans are ending. The NPR also should consider possible changes to the current modernization program to achieve greater adaptability suitable for circumstances in which threats are emerging beyond what has been expected, more funding becomes available, new technological opportunities appear, or threat conditions dictate that US capabilities must be improved at a faster-than-planned pace.

Missile Defense

Ballistic Missile Defense (BMD) is widely recognized as a critical component of national and regional security, and has the potential to contribute significantly to deterrence, assurance, and damage limitation in a dynamic strategic environment.

Strategic missile defenses were severely restricted by treaty for 30 years on the assumption that they undermined “stable” mutual deterrence. However, missile threats

facing the United States and its allies have been expanding for decades, and homeland and regional defenses now are accepted as essential contributors to security. Indeed, BMD can support all three priority purposes of US nuclear capabilities in general:

Deterrence. BMD can contribute to deterrence in several ways. First, it may provide the United States with very useful alternatives to offensive preemption or retaliation in crises. This was the case, for example, in the days prior to North Korea's 2006 Taepodong-2 launch, when the deployment of a limited US homeland-defense system gave President Bush an alternative to a preemptive strike on the North Korean missile site (as was recommended by some at the time). Second, by helping to deny adversaries plausible limited nuclear first-use options against US allies and the US homeland, BMD can discourage even determined opponents from pursuing such dangerous strategies and deny their effectiveness in cases where opponents choose such strategies. Third, by relieving pressure to strike an adversary's launchers preemptively in crises, effective BMD also can buy time for leaders to pursue diplomacy or non-nuclear means of averting or limiting escalation in an emerging nuclear crisis. Finally, point defense for critical military assets at home and abroad can enhance the survivability of US and Western deterrence forces that an adversary otherwise might believe it could eliminate by preemptive attack—thereby strengthening deterrence and discouraging opponents from dangerous first-strike concepts.

Assurance. First, by reducing the potential costs of conflict with an ICBM-capable adversary, missile defense of the US homeland can improve the credibility of US security guarantees to allies by helping to counter an opponent's possible expectation that nuclear threats to the US homeland will work to decouple the United States from allies. Second, regional missile defenses help to reinforce assurance by providing local defensive capabilities while demonstrating the US security commitment. Finally, the cooperative process of developing and deploying missile defenses helps to build stronger alliance relationships and gives the United States a larger presence in, and commitment to, allies' security.

Damage limitation. Missile defenses can contribute to damage limitation by helping to discourage an adversary from escalating a conflict, and by providing a potentially meaningful degree of societal protection in many plausible conflict scenarios. BMD also can provide unique damage-limitation capabilities against the possibility of an accidental or unauthorized missile strike.

Finally, BMD can help provide a relatively near-term counter to the emerging North Korean missile threat—a defensive alternative to the option of a pre-emptive strike often discussed publicly. In addition, BMD may contribute to the goal of dissuading some adversaries from acquiring missile capabilities in the first place. For example, the prospect of strong US BMD against long-range ICBMs from Iran or North Korea could help

discourage their continued investment of scarce resources in the development of such weapons.

Summary conclusion. Far from being an impediment to deterrence, BMD has emerged as a potentially crucial element in support of deterrence—particularly with regard to smaller and more unpredictable nuclear adversaries. BMD can also contribute uniquely to US assurance and damage-limitation goals. The larger report offers detailed recommendations for consideration in the forthcoming NPR to help improve the contributions of BMD to deterrence, assurance, and damage limitation. These include, for example: improving and expanding US capabilities for homeland defense, including defense against cruise missiles and potentially hypersonic missiles; expanding and accelerating SM-3 capabilities; the fielding of a space-based layer of sensors for persistent “birth-to-death” missile tracking and discrimination; providing operational capability to the Aegis Ashore Missile Defense Test Complex in Kauai, Hawaii; and, *inter alia*, continuing readiness efforts for a possible East Coast BMD site.

Implications for Security in the NATO Region

After the collapse of the Soviet Union, NATO reduced but by no means eliminated the role of nuclear weapons in its military strategy and deterrence posture. In light of the resurgent threat from Russia, particularly since 2014, nuclear policy and its contribution to deterrence and assurance once again are major topics within the alliance. Moscow’s ongoing nuclear modernization programs and its emphasis on the nuclear first use or “escalate-to-win” option—effectively the threat or limited use of nuclear weapons to coerce NATO into backing down in a conventional conflict—create anxieties in NATO and a corresponding desire to strengthen deterrence and assurance. The forthcoming NPR and possible revisions of NATO’s 2012 Deterrence and Defense Posture Review (DDPR) are opportunities for clarity and direction.

The renewed adversarial relationship with Russia and the apparent narrowing of Western non-nuclear military advantages mean that the United States and NATO need to reexamine and possibly revise their nuclear policy and posture. Key issues include: the future of US nuclear forces designated for NATO, especially the US B61 bomb and the DCA used to carry it; changes to the alliance’s declaratory policy on the role of nuclear forces; involvement of additional NATO-member states in nuclear-sharing arrangements; and readiness levels and deployment locations throughout the alliance. The overarching deterrence goal in this regard is to deny Russia any plausible basis for perceiving exploitable political or military advantages that could lead Moscow to consider aggression or nuclear escalation against the West, even in crises.

This report includes the following recommendations for consideration:

1. In its forward-deployment decisions and declaratory policy, the United States and NATO must repeatedly make clear the indivisibility of the alliance and its nuclear

policy: that an attack on one is an attack on all, and that any Russian nuclear escalation against the West would be the worst possible course for Russia under any circumstances.

2. The B61 life-extension bomb, the B61-12, reportedly will be the only US nuclear weapon based in Europe with precision accuracy and a low-yield option. Therefore, it should not be subject to further procurement delays, but instead should be advanced to the extent possible.
3. Availability of the nuclear-capable F-35A aircraft should be accelerated in order to provide NATO with the stealth technology to counter Russian air defenses and thereby enhance its deterrence credibility.
4. Nuclear burden sharing—especially in the deployment and support of DCA—should be widened in NATO, particularly including the former Warsaw Pact countries of Eastern Europe.
5. The United States should consider deploying sub-strategic missiles at sea in the NATO region or on NATO territory to increase the adaptability of its nuclear deterrent.
6. The United States and NATO should prioritize creation of an integrated air and missile defense system for the alliance, in order to help make a limited Russian nuclear attack unacceptably difficult and risky.

Summary conclusion. US nuclear forces deployed in Europe must continue to serve the dual purpose of underpinning deterrence—by posing the threat of incalculable costs in the mind of a potential aggressor—and assuring allies in the face of nuclear coercion. Adjustments to US and NATO capabilities and declaratory policy to meet these essential purposes and advance Western adaptability should now be considered.

Implications for Asian Security

Asia continues to constitute a highly-dynamic security environment. With regard to US nuclear policy and posture, four imperatives stand out.

A nuclear- and missile-armed North Korea must be countered. This is a considerable challenge since—during the plausible time horizon of the forthcoming NPR—the DPRK reportedly could emerge with a nuclear force of between 60-100 weapons, deployed on a mix of short- and long-range delivery systems. Meanwhile, the country continues to be led by an eccentric, opaque and unpredictable dynastic regime.

US nuclear capabilities have long played a central role in the deterrence of North Korean aggression and the assurance of Asian allies, and will continue to do so. Forward-deployable strategic weapons in the US triad provide essential support for these goals—to

signal US resolve to North Korea and to allies, and to help limit escalation in the event of conflict. Additional US nuclear capabilities—DCA hosted at Japanese and South Korean bases—may be important for deterrence of the DPRK. In addition, the United States should retain the ability to deploy nuclear-capable bombers in the region and demonstrate the capability for stand-off attack with stealthy delivery systems such as the LRSO. A low-yield nuclear weapon that could be delivered promptly against defended North Korean airspace also should be considered.

Finally, as discussed previously, US and allied missile defenses must help counter North Korean missile threats and defend against missile attack if deterrence fails.

Chinese expansion at the expense of US and allied interests must be deterred. China's assertiveness in declaring control of contested islands and a widening swath of ocean has occurred in recent years alongside the expansion and modernization of its nuclear force. While China remains the least transparent of the P-5 nuclear powers, its historical reliance on a small fleet of silo-based ICBMs clearly has given way to a mix of silo-based and mobile ICBMs and sea-based SLBMs, as well as a possible role for a nuclear bomber. This shift will give China more nuclear options, and more discriminate nuclear options to deter and coerce the United States and allies in its bid for regional hegemony.

China's growing assertiveness, expanding nuclear posture, and uncertainties about its future course may well create new nuclear requirements for the United States and the corresponding need to determine whether, when, and how to deploy additional capabilities. The United States must sustain capabilities with the requisite flexibility and resilience to deter China at many possible levels of escalation, and limit damage should deterrence fail.

The assurance of US allies in Asia remains of vital importance. Assurance is based on allied confidence that the regional deterrence strategies of the United States, Japan and South Korea are credible and supported by the necessary US and allied capabilities. Formal extended-deterrence dialogues begun by the United States in 2010 have had a positive impact in this regard and should be continued. The United States should consider going further to implement "NATO-like" nuclear consultation with Northeast Asian allies. The United States also should continue to press Japan and South Korea for trilateral cooperation, which would likely have a powerful effect signaling resolve against potential Chinese and DPRK aggression, and thus contribute to deterrence.

Consideration of rising nuclear dangers in South Asia remains important. Though the United States does not have an alliance-based role in deterring aggression between India and Pakistan, US interests are involved. The possibility of a Pakistani nuclear weapon falling into the hands of terrorists is a particular concern. Therefore, US policy should continue to encourage dialogues between India and Pakistan on nuclear issues, and to

emphasize preparations for an emergency response to the loss of control of one or more Pakistani weapons.

Summary conclusion. As nuclear capabilities and military threats continue to grow in Asia, US nuclear forces will play a more important role in supporting key deterrence and assurance goals. Recommended here are considerations for strengthening the capabilities needed to support these goals and advance the adaptability of US forces and strategy.

Affordability of Nuclear Deterrence

The cost of US nuclear capabilities ultimately must be judged against the value they provide in support of US national goals—especially deterring war, assuring allies, and limiting damage if deterrence fails, particularly by preventing the escalation of conflict. In that light—and considering the likely consequences of a nuclear attack—the value of nuclear capabilities needed to support these goals may be judged as virtually infinite.

Infinite resources, however, are not available for any purpose, of course. And after decades of very limited investment in nuclear capabilities, today's estimated costs for the simultaneous modernization of the US nuclear triad appear especially daunting—reportedly ranging from roughly \$400 billion over the next 10 years to as much as \$1 trillion over the next three decades. Critics of such spending levels contend that nuclear forces are inappropriate to meet new 21st-century threats, should be minimized rather than upgraded to avoid wider global nuclear proliferation, and will lead to the starvation of needed investments in conventional forces.

In contrast, this report concludes that necessary investments in US nuclear-force modernization are, in fact, affordable and necessary; they should not rise beyond about five-seven percent of the US defense budget, even at the estimated peak of likely spending in the coming years—well within and even below historic US spending patterns for these forces and goals.

Moreover, critics of nuclear-investment costs greatly underestimate the unique value of nuclear forces in sustaining deterrence against the most dangerous threats and adversaries. US nuclear forces help deter existential nuclear threats to the homeland and to our allies. They provide a deterrent against the use of other types of weapons of mass destruction—including chemical and biological agents—against which the United States no longer possesses the ability to threaten comparable retaliation. They help cement US alliances by strengthening US security guarantees to allies and strategic partners. And, by deterring an opponent's escalation, they underpin the US goal of damage limitation in the event of conflict and the US freedom to use conventional forces effectively to protect American interests.

In the near term—in order to protect long-overdue investments in nuclear forces—this report recommends that Congress consider relief from the budgetary caps imposed (through so-called “sequestration”) by the Budget Control Act of 2011. If current budget

law is not amended, the new administration should use executive authority to exempt spending on nuclear forces from the mandatory sequestration cuts.

Over the longer term—to build the kind of public and intra-governmental consensus necessary to sustain investments in needed US nuclear capabilities—the report recommends considering novel budgeting approaches. These could include the creation of a mandatory nuclear-insurance policy—amounting to a fixed portion of defense spending—or the establishment of a “strategic deterrence fund” to cover modernization needs over longer periods of time and thereby create efficiencies.

More fundamentally, the report recommends countering a widespread lack of understanding in key US constituencies about the importance of nuclear capabilities. Senior-level political and military leaders must make a consistent and systematic effort to educate the US Congress, the general public, and the uniformed military about the overwhelming value of nuclear forces to the country’s priority security goals.

Summary conclusion. Funding the US nuclear force and modernization programs is both necessary and affordable. Failure to do so would increase the risk of intolerable consequences to the nation. Congress and the executive branch should assure steady investments, and US leaders should better inform Americans about the essential purposes and value of nuclear capabilities for credible deterrence, assurance and damage limitation.

Declaratory Policy

The primary purposes of declaratory policy are to signal US deterrence goals and expectations, including with regard to nuclear forces, and to help thereby deter foes and assure allies. Such statements form an essential component of US deterrence and assurance strategies, and their content and evolution should be considered as such in the forthcoming NPR.

Current US declaratory policy stems from the Obama Administration’s response to a 2009 review undertaken by the bipartisan Strategic Posture Commission (the “Perry-Schlesinger Commission”). At that time, the United States reasserted traditional positive security guarantees: the commitment to come to the aid of allies under attack. It also reasserted traditional negative guarantees, with a modification, promising not to employ nuclear weapons against countries that are parties to the Treaty on the Non-Proliferation of Nuclear Weapons (NPT) “and in good standing with their nuclear nonproliferation obligations.” The United States *rejected* declarations of “no first use” (the promise that the United States would employ nuclear weapons only in response to a nuclear attack) and “sole purpose” (the statement that the sole purpose of US nuclear capabilities is to deter nuclear attack). Instead of “no first use” or “sole purpose” declarations, the United States retained its traditional approaches of calculated ambiguity surrounding the employment of nuclear weapons and the application of nuclear deterrence to a spectrum of severe threats to the United States and allies.

This report concludes that the continued rejection of “no first use” and “sole purpose” declaratory policies is prudent. A no-first-use declaration would unsettle US allies and weaken deterrence by making conventional attack on an ally appear less risky. Correspondingly, it also would likely contribute to further nuclear proliferation incentives by undermining US assurance goals. A “sole-purpose” declaration would be extremely imprudent as long as significant biological, chemical, and large-scale conventional threats continue to exist as possible contingencies to be prevented via nuclear deterrence. The report also recommends retaining current US policies regarding nuclear-alert status and the option for “launch under attack.”

The United States, however, should consider greater clarity and specificity regarding its declaratory nuclear policy in some cases. In the face of Russia’s “escalate-to-win” concept and China’s increasing military power and expansionism, more specific deterrent threats may be needed to strengthen deterrence and assurance. This would involve the United States and allies more clearly articulating a consensus on nuclear deterrence policy and options to prevent various possible levels of escalation. Calculated ambiguity may remain, but deterrence at lower levels of possible escalation could be served by a variety of measures, including public signaling of NATO and allied cohesion and nuclear exercises.

The report also recommends that the United States clarify once again that it will maintain the capabilities needed to design, develop, produce, certify and, if necessary, deploy nuclear weapons in support of national deterrence and assurance goals. US intentions in this regard appear to have become uncertain in recent decades, potentially unsettling allies and leading adversaries to conclude that this is an advantageous area in which to challenge the United States.

Summary conclusion. Declaratory policy remains a vital component of nuclear deterrence and assurance goals. It should contribute to, not limit, US adaptability. Current US declaratory policy is appropriate to today’s security environment and does not require significant overhaul. However, consideration should be given to greater specificity and manifest allied cohesion regarding deterrence signaling, and the clear demonstration of US intent to maintain its nuclear capabilities into the future.

Arms Control and US Goals in the New Threat Environment

Arms control is a long-standing element of nuclear policy and its content and usefulness in the current security environment must be considered. In general, Russia has not been a cooperative or trustworthy arms control partner for many years. Russia has rejected recent US arms control overtures in strong terms, and both Russia and China currently pursue aggressive, expansionist foreign policies—backed by growing nuclear arsenals—at the expense of US allies. These conditions do not make for a promising arms control environment and suggest that a key requirement of US arms control efforts in the coming years must be to strengthen US deterrence, assurance and damage-limitation capabilities

by contributing to the adaptability of US nuclear capabilities, rather than seeking continued numerical nuclear force reductions in the pursuit of nonproliferation as the “top” nuclear policy objective. In addition, US allies and partners should be consulted closely on arms control efforts to reinforce the vital assurance goals of nuclear policy.

The report focuses heavily on the supposed linkage between continuing US nuclear reductions and the advancement of US nonproliferation goals. It does so because widespread belief that US nonproliferation goals demand continuing US nuclear reductions and limitations has had such a significant effect on US nuclear policy for many years. Contrary to this widespread belief, however, available evidence suggests strongly that the reduction of US nuclear capabilities and their limitation does not advance nonproliferation. Rather, it may in fact contribute to proliferation by motivating some allies under threat in the current environment (particularly in Asia) to consider acquiring their own independent nuclear deterrence capabilities. Instead of focusing the US arms control agenda on further US nuclear reductions for nonproliferation purposes, the United States should instead emphasize proven approaches to minimizing and countering proliferation, such as extending credible nuclear deterrence to allies, denying other countries the technology required to produce nuclear weapons, addressing the actual factors that motivate countries to pursue nuclear weapons in the first place, and pursuing a variety of defensive measures to protect against proliferation.

The report recommends consideration of a set of basic principles for the United States with regard to further arms control or limitation agreements, including:

1. Arms control should not be pursued for its own sake, and/or necessarily for the elimination of nuclear weapons, but rather to advance the traditional goals of arms control: reducing the probability of war, the consequences of war, and the cost of maintaining adequate defense capabilities. As such, a primary goal of US arms control policy now should be to advance the adaptability of US capabilities so as to strengthen their support for US deterrence, assurance and damage-limitation goals.
2. The US arms control agenda should not be bound by the 2013 US proposal for further reductions of up to one-third of US deployed strategic weapons.
3. If US-Russia nuclear arms control negotiations again become feasible, then non-strategic nuclear forces also must be included.
4. Effective verification and enforcement of agreements is essential, and the United States should not consider new arms control steps as long as Russia remains in stark non-compliance with existing agreements.
5. The United States should avoid re-establishing treaty limits on missile defense.

The report recommends that the United States continue adhering to the New START Treaty through its 2021 end date as long as Russia remains in compliance. If Russia does not comply with New START, then the United States should mitigate the consequences and

strengthen US adaptability outside the treaty as necessary. The Trump Administration also should review the existing US position in support of the Comprehensive Test Ban Treaty (CTBT); the National Nuclear Security Administration (NNSA) should, for the sake of prudence, be directed to improve its readiness for testing—even if there is no immediate need to resume nuclear testing.

Finally, the report endorses the pursuit of feasible cooperative endeavors with both Russia and the PRC, and points to participation in the Global Initiative to Combat Nuclear Terrorism (GICNT) as an example of possible avenues for cooperation.

Summary conclusion. The United States must be clear-eyed about its own arms-control goals, the intentions and trustworthiness of its arms control interlocutors, and the essential requirement for verification and enforcement of all existing and prospective arms control endeavors. Simultaneously, the United States should consider using available arms control venues and cooperative possibilities to explore new options to reduce the probability of war, the destructiveness of war, and the cost of sustaining adequate deterrence, assurance and defense capabilities.