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EDITOR'S NOTE

Welcome to the third issue of Volume 6 of National Institute's online *Journal of Policy & Strategy*—a quarterly, peer-reviewed publication. Sadly, this issue notes the passing of former Senator John L. Kyl of Arizona. The late Senator Kyl was a true patriot and a champion of defending the American people against growing missile threats and ensuring a robust U.S. nuclear posture in the face of aggressive actions by America's enemies. His loss will be keenly felt, and this issue of the *Journal of Policy & Strategy* contains a special feature dedicated to him.

This issue's "Analysis" section includes four seminal articles on nuclear deterrence, chemical weapons, arms control, and Russian behavior. They include an excellent analysis by Michaela Dodge of the philosophical and methodological flaws in the U.S. approach to arms control over the past century; a review of the breakdown in deterrence of chemical warfare by John Mark Mattox; an assessment of the need for U.S. theater nuclear capabilities and the challenges associated with them by Christopher A. Ford; and a detailed analysis of the factors and motivations driving Russia's aggressive behavior by Stephen Blank.

Readers will also find the proceedings from three of National Institute's regular online symposia, or "webinars." These proceedings provide insights from multiple subject matter experts who participated in the symposia held in May, June, and July 2026. The topics covered included: "Toward a Free and Unified Korea—Resolving the Korea Challenge at Its Source"; "Assessing U.S. Nuclear Requirements for Deterrence"; and "Germany's New Military Strategy and Its Implications."

This issue of the *Journal of Policy & Strategy* also includes an interview with The Honorable Mark T. Esper, 27th Secretary of Defense and 23rd Secretary of the Army. Secretary Esper discusses a range of national security issues, including his views on the most significant overall threats to U.S. security, the most serious bureaucratic impediments to timely decision making within the Pentagon, and the importance of President Trump's Golden Dome initiative. He also comments on Russia's war against Ukraine, the current conflict with Iran, U.S. relations with NATO, and the adequacy of U.S. nuclear posture.

The "Literature Review" includes three reviews. The first, by Keith B. Payne, examines Michaela Dodge's recent *Occasional Paper* on *Enduring Arms Control Myths: A Century of Experience*. The *Occasional Paper* provides a comprehensive assessment of the faulty arms control pathologies that have governed U.S. arms control behavior resulting in agreements that typically failed to live up to their exaggerated expectations. The second review, by Michaela Dodge, examines David Holloway's book, *Nuclear Weapons: An International History*, which offers an account of the development of U.S. nuclear weapons and strategy, with shorter discussions of other states' nuclear weapons programs and efforts to minimize their spread. The third review, by David J. Trachtenberg, assesses Thomas Kent's book, *The Propaganda Manual of the Ukraine War, Information Warfare by Russia, Ukraine and Western Nations: Lessons Learned for Future Conflicts*. The book documents the successful and not-so-successful efforts of Russia, Ukraine, and the West to shape the narratives of Russia's war on Ukraine in ways that generate support for their respective policies and positions.

The "Documentation" section includes the written testimony of National Institute Senior Scholar and former Deputy Under Secretary of Defense for Policy David J. Trachtenberg on



Golden Dome before the Strategic Forces Subcommittee of the Senate Armed Services Committee on September 29, 2026; select excerpts from the August 27, 2026 remarks of Under Secretary of War for Policy Elbridge Colby before NATO's North Atlantic Council; select excerpts from Under Secretary Colby's August 5, 2026 remarks at the U.S. Strategic Command Deterrence Symposium in Omaha, Nebraska; and select excerpts from Secretary of War Pete Hegseth's remarks at the 2026 NATO Defense Ministerial in Brussels, Belgium.

This issue's "From the Archive" section includes an article on *Deterrence without defense: gambling on perfection*, by Keith B. Payne and Lawrence R. Fink, published in the Winter 1989 issue of *Strategic Review*; and a summary of *Maintaining Effective Deterrence* by Colin S. Gray, published by the U.S. Army War College on August 1, 2003.

Finally, this issue contains a special feature honoring the late Senator Jon L. Kyl of Arizona. It includes comments by Senator Kyl during the Senate's ratification debate on the Comprehensive Test Ban Treaty in 1999 and the importance of maintaining the credibility of the U.S. nuclear stockpile. Also included is Senator Kyl's joint testimony with The Honorable Madelyn Creedon on the 2023 Strategic Posture Commission's findings and conclusions. The Senator was a voice of reason, always willing to work across the aisle to achieve bipartisan consensus on issues most important to ensuring U.S. national security.

As always, we strive to bring you, our readers, a variety of informative and relevant commentaries and analyses that address some of the most critical national security issues of our time. We hope this issue of the *Journal of Policy & Strategy* meets your expectations and that you find the articles it contains enlightening and valuable. Above all, we greatly appreciate your interest in and support of the Institute's work.



ANALYSIS

ENDURING ARMS CONTROL MYTHS: A CENTURY OF EXPERIENCE*

Michaela Dodge

*"In recent years the United States has gone well beyond treating arms control agreements as the supreme law of the land. We have elevated them into a kind of holy writ. Arms control has become a form of secular religion, with the arms control community as its faithful acolytes."*¹

Contemporary arms control has been guided by almost canonical concepts and propositions that are intellectually seductive because they promise relatively easy solutions to some of the most difficult national security problems. Yet, as the following study shows, most of the propositions that have historically guided U.S. arms control efforts are not only incorrect, but also harm the U.S. ability to effectively counter its adversaries.

The historical pattern indicates that one of the reasons is that, while the United States follows treaties to the letter and imposes restraint on its existing or prospective programs that would violate even the "spirit" of an agreement (whatever this "spirit" is), adversaries simply ignore them when they are inconvenient. At the same time, they use treaties to restrict U.S. programs that threaten the advancement of their goals. The case studies also illustrate that multiple arms control fallacies usually operate at the same time and feed off each other, often compounding the resultant U.S. national security problems.

For arms control advocates, hope springs eternal that the next agreement will improve political relations among adversaries. For example, despite the worsening national security environment and Moscow's decades-long history of violating agreements, the Biden Administration emphasized the importance of arms control, not deterrence, as the "most effective" tool to prevent nuclear "use." Ironically, there were no nuclear arms control negotiations under Biden and Russia violated, and then illegally "suspended," the now-expired New Strategic Arms Reduction Treaty (New START).² President Trump has expressed sweeping arms control goals, raising a question that, until recently, seemed

* This analysis piece is based on Michaela Dodge, *Enduring Arms Control Myths: A Century of Experience*, Occasional Paper, Vol. 6, No. 6 (Fairfax, VA: National Institute Press, August 2026), <https://nipp.org/wp-content/uploads/2026/08/Vol.-6-No.-8.pdf>. The author is grateful to the National Institute for Public Policy for its permission to republish this material.

¹ James Strom Thurmond, quoted in Government Printing Office, "Military Implications of the Chemical Weapons Convention (CWC)," *Hearings before the Committee on Armed Services, United States Senate, One Hundred Third Congress*, August 9, 11, and 18, 1994, <https://babel.hathitrust.org/cgi/pt?id=uc1.31210018779619&seq=1>, p. 99.

² Department of State, "U.S. Countermeasures in Response to Russia's Violations of the New START Treaty," Fact Sheet, June 1, 2023, <https://www.state.gov/u-s-countermeasures-in-response-to-russias-violations-of-the-new-start-treaty/>; and, Boris Bondarev, "The Fallacy of Negotiating With Putin," *Eurasia Daily Monitor*, Vol. 20, Issue 76 (May 10, 2023), <https://jamestown.org/program/the-fallacy-of-negotiating-withputin/>.



sidelined: what new arms control steps will the United States take with regard to a follow-on agreement to New START?³

Consequently, a critical issue now is to understand the demonstrably fallacious concepts and expectations that have driven U.S. arms control positions, and continue to have harmful effects. Some of these are unique to the nuclear age; others can be seen many decades earlier. By demonstrating the mendacity of such concepts and expectations, this analysis piece provides an outline for a more factually-grounded framework for any future U.S. arms control endeavors. This is a matter of simple prudence to help contemporary U.S. policymakers avoid basing their decisions regarding arms control on demonstrably misguided concepts/expectations.

The study is based on an examination of government reports, Congressional hearings, academic commentaries, and pertinent diplomatic histories, including the 1928 Kellogg-Briand Pact, the Washington Naval Treaty of 1922, the London Naval Treaty of 1930, the nuclear testing regime, as well as interviews with experts of diverse backgrounds and opinions on arms control. Arms control is not new; it was not new when nuclear weapons were invented in 1945, and the pathologies underlying problematic U.S. arms control behavior have extended from the pre-nuclear age to the present.

Chronic Arms Control Fallacies Continuing to Shape the Negotiations Process

There are several chronic pathologies recurring in the U.S. arms control process to date. They are important to counter as the United States prepares for the next round of arms control negotiations with adversaries.

Fallacy #1: The Fallacy That a Liberal Economic Order Will Lead to Peace

Prior to World War I, Sir Norman Angell argued persuasively that the common advantages of international trade and cooperation had rendered aggression so costly and disadvantageous that all countries behaving rationally would increasingly cease war and the preparation for war in favor of the mutual benefits available via amity and undisturbed economic cooperation.⁴ Sir Norman's advocacy of disarmament as a natural corollary of this supposed dynamic had a powerful effect within the British elite prior to World War I and jeopardized the needed British preparation for conflict. Of course, economic arguments only

³ Amy F. Woolf, Nikolai Sokov, and Dai Huaicheng, "Evaluating Current Arms-control Proposals: Perspectives from the US, Russia and China," *International Institute for Strategic Studies*, October 2024, [iiss_mdi_evaluating-current-arms-control-proposals_22102024.pdf](https://www.iiss-mdi.org/evaluating-current-arms-control-proposals_22102024.pdf).

⁴ See Norman Angell, *The Great Illusion: A Study of the Relation of Military Power to National Advantage* (London: William Heinemann, 1912), pp. 119, 220; and Michael Rühle, "From Pacifism to Nuclear Deterrence: Norman Angell and the Founding of NATO," *Information Series*, No. 582 (Fairfax, VA: National Institute Press, April 4, 2024), <https://nipp.org/wp-content/uploads/2024/04/IS-582.pdf>.

partially, and sometimes not at all, shape leaders' calculations when deciding how to best advance their interests.

History shows that leaders are willing to pay massive economic penalties for advancing their national interests through war—and that the population often supports them in their endeavors. Fear, honor, and interest defined from a leader's vantage point are not easily reducible to monetary figures, if such a thing is possible at all. There is no universally shared conception of rationality informing a decision-making; that is why adversaries' beliefs and values must be taken into account when Washington is devising a strategy to influence their behavior.⁵

During the Cold War, much the same argument was applied by some to the Soviet Union as the rationale for détente era arms control agreements. It was later similarly repeated in the expectation that China would rise peacefully and take its place within the civilized "international community." Russia's full-scale invasion of Ukraine in February 2022 was virtually unthinkable by much of the U.S. and European foreign policy establishment until the very last moment, when Russia's preparations made it obvious that doing so is what Russia intended. The United States supposedly could prudently remove regional forces, including nuclear, from Europe and Asia. That expectation has proven again to be a serious mistake.

During the post-Cold War era, many U.S. officials believed the potential for conflicts among great powers was a thing of the past, and therefore the United States could move away from maintaining military capabilities or a defense industrial base associated with the need to prepare for great power confrontation and even war. In 1990, then-President George H. W. Bush stated:

A new partnership of nations has begun ... An era in which the nations of the world, east and west, north and south, can prosper and live in harmony. ... A world quite different from the one we've known. A world where the rule of law supplants the rule of the jungle. A world in which nations recognize the shared responsibility for freedom and justice. A world where the strong respect the rights of the weak.⁶

One of the standard arguments was that increasing economic interdependence and the associated goal of prosperity would trump political hostilities and lead to more peaceful relations, including among political opponents. This is akin to Norman Angell's pre-World War I brutally disproven thesis, and the idea is not faring much better this time around. Adversaries have their own ideas and political calculations that defy enduring American expectations that opponents will engage in benign cooperation based on shared Western

⁵ For more information on this topic, see Sarah Faris, "Tailoring Deterrence: What and Why?," Information Series, No. 635 (Fairfax, VA: National Institute Press, September 2, 2025), https://nipp.org/information_series/sarah-faris-tailoring-deterrence-what-and-why-no-635-september-2-2025/

⁶ George H. W. Bush, address to a joint session of Congress, reprinted in, "Bush 'Out of These Troubled Times...A New World Order,'" The Washington Post, September 12, 1990, <https://www.washingtonpost.com/archive/politics/1990/09/12/bush-out-of-these-troubled-times-a-new-world-order/b93b5cf1-e389-4e6a-84b0-85f71bf4c946/>.

norms and the goal of overall economic prosperity. China is using its wealth to challenge U.S. interests, disrupt its alliances, and supporting Russia's conquest of Ukraine.

***Fallacy #2: The Fallacy That the Arms Control Process
Will Independently Improve Political Relations***

The notion that arms control will markedly improve political relations with opponents is, perhaps, the most prominent and enduring, but most obviously wrong, expectation. For example, despite expectations advanced on behalf of the League of Nations, the Kellogg-Briand Pact, and the Naval Arms Agreements, there was little/nothing that these diplomatic/arms control efforts did to promote improved political relations with the aggressive, expansionist powers of the early 20th century. The process of obtaining an arms control agreement becomes almost as important as the agreement itself, and the contents of the agreement are secondary, because the process is said to improve political relations between states. A close examination of the historical record shows that this common assumption is wrong. U.S. adversaries understand full well that weapons serve political means, and so does the process designed to control the weapons. They use the arms control process to restrain those U.S. capabilities that potentially create most strategic dilemmas for them, and leave the door open as much as possible for the development of their own capabilities that challenge the U.S. attainment of its own objectives.

During the Cold War, the United States mistakenly separated thinking about an adversary's political goals and the arms control process. This step was an essential enabler of negotiations because it made it easier to convince the American public that the process of negotiating with the Soviet Union served U.S. interests regardless of adversaries' political objectives. Otherwise, why negotiate with an adversary with fundamentally different political goals, bent on destroying the United States and its allies, and investing massive resources in weapons capable of doing so? Why negotiate with an adversary that uses the process of negotiations to weaken the United States and restrain U.S. programs that generate the most challenges for its ability to pursue its goals?

The Soviet Union used the arms control process to limit U.S. armaments while expanding its own capabilities to meet the demands of its explicitly "war-fighting" nuclear doctrine.⁷ Moscow knew it could not win a military competition with a fully engaged United States, so it used the arms control process to help restrain Washington in areas of U.S. advantage (e.g., missile defense) while leaving space for its own nuclear force expansion as wide open as possible, including violating arms control agreements when it suited Soviet interests.

⁷ See, for example, Keith B. Payne, *The Great American Gamble: Deterrence Theory and Practice from the Cold War to the Twenty-First Century* (Fairfax, VA: National Institute Press, 2008), p. 85; Lothar Rühl, "Offensive Defence in the Warsaw Pact," *Survival*, Vol. 33, No. 5 (September/October 1991), pp. 442-450; Beatrice Heuser, "Warsaw Pact Military Doctrines in the 1970s and 1980s: Findings in the East German Archives," *Comparative Strategy*, Vol. 12, No. 4 (October-December 1993), pp. 437-458; and, Beatrice Heuser, "Victory in a Nuclear War? A Comparison of NATO and WTO War Aims and Strategies," *Contemporary European History*, Vol. 7, No. 3 (November 1998), pp. 311-327; and, Matthias Uhl, "Storming on to Paris: The 1961 Berlin Exercise and the Planned Solution of the Berlin Crisis," in, *War Plans and Alliances in the Cold War*, Vojtech Mastny, Sven Holtsmark, and Andreas Wenger, eds. (Oxford: Routledge Press, 2006), pp. 46-71.

Moscow understood and played on the same enduring and naïve arms control expectations that drove democracies during the interwar period—and succeeded brilliantly.

Despite decades of advocacy to the contrary, the arms control process never had any innate power to improve political relations between the United States and the Soviet Union, no matter the wishes of U.S. participants. It has no innate power to improve relations between the United States and its self-declared adversaries today, and therefore it does not offer a unique means of resolving fundamental national security challenges.

Fallacy #3: U.S. Armaments Incite Opponents' Arms Buildups; U.S. Inaction Stops It

U.S. arms control advocates in and out of government have been prone to believe that U.S. actions are the most important driver of adversaries' actions, and that if the United States stops pursuing armaments or reduces them, others will follow. Based on this assumption, they advocate U.S. unilateral restrictions and unilateral force reductions and demand that the United States refrain from pursuing certain programs and activities involving modernization lest they cause adversaries to react in ways deemed undesirable to the United States. Yet, adversaries have political goals and pursue military policies and programs to achieve those goals with minimal regard for U.S. (in)actions. They do not engage in benign reciprocity in this regard despite Washington's belief that it can set a "good example" and appeal to opponents' "better angels."

During the Cold War, the U.S. understanding of an arms race driven by U.S. actions and technological developments to which the Soviets were compelled to respond, without regard for the Soviet strategic culture, resources, or political objectives, was a primary rationale for the ABM Treaty and the SALT process. The experience illustrates the fallacy of such thinking. Despite almost a complete cessation of U.S. missile defense efforts, the Soviets greatly increased the number of their strategic nuclear warheads.

The U.S. multi-decade cessation of nuclear testing, unilateral reductions, and an almost complete halt to nuclear forces modernization, were not reciprocated by any of its adversaries. Washington delayed, scaled down, or altogether stopped its nuclear modernization programs as soon as the Cold War ended, and stopped all nuclear warhead testing and yield-producing experiments in the 1990s following President Clinton's signature of the Comprehensive Test Ban Treaty (CTBT). The U.S. Senate rejected the treaty after a full floor debate, but Washington has been complying with its terms ever since, despite its adversaries having active nuclear testing programs.

Russian, Chinese, or North Korean nuclear warhead production complexes are more capable of producing new nuclear warheads than is the U.S. nuclear warhead complex. After the end of the Cold War, China substantially increased its military spending and launched a major nuclear weapons buildup.⁸ This cycle appears to be a repeat of the 1970s and 1980s when Moscow dramatically increased the number and lethality of its strategic nuclear

⁸ Bill Gertz, "EXCLUSIVE: China building third missile field for hundreds of new ICBMs," *The Washington Times*, August 12, 2021, <https://www.washingtontimes.com/news/2021/aug/12/china-engagedbreathhtaking-nuclear-breakout-us-str/>.

warheads following the signing of the 1972 ABM Treaty that prohibited U.S. missile defense research and the Strategic Arms Limitation Talks (SALT) I agreements—confounding U.S. expectations at the time.

***Fallacy #4: The Mirror Imaging Fallacy:
Assuming That Adversaries Share U.S. Assumptions***

The United States often bases its arms control efforts on demonstrably wrong assumptions about its political adversaries, namely that they perceive and understand rationality the same way as does Washington, and share its priorities. The assumption is rooted in the mirror-imaging fallacy. U.S. leaders and their government representatives often act as if other political leaders will think and act as they do, and have very little appreciation for the profound differences between and among them, if they are aware of them at all. But foreign leaders likely define rationality differently based on their divergent strategic cultures and individual experiences.⁹ The mirror imaging results in suboptimal arms control agreements and treaties that disadvantage the United States and allies in the long run.

During the Cold War, a significant part of the U.S. national security establishment embraced the expectation that if the United States did not deploy strategic missile defenses, Moscow would, correspondingly, arrest its offensive missile buildup—but if the United States deployed such defenses, Moscow would respond by expanding its offensive missile capabilities. The United States approached the SALT talks “...as a seminar. We would educate the Soviets, and they will see things the way we do. Then we could come to a mutually beneficial agreement.”¹⁰

The Soviet Union, far from subscribing to this logic, took advantage of U.S. missile defense restraint to expand its arsenal of strategic nuclear warheads. This dynamic continued following the Cold War, after the initial economic shock from the breakup of the Soviet Union passed. In contrast to popular expectations, the U.S. 2002 withdrawal from the 1972 Anti-Ballistic Missile (ABM) Treaty was followed by the signature of the Moscow Treaty, which reduced U.S. and Russian offensive strategic forces.

***Fallacy #5: The Assumption That States Will Comply with
Their Arms Control Obligations, or Can Be Persuaded to Comply***

The United States tends to advance arms control initiatives with the promise (or expectation) that opponents will not risk the potential cost of non-compliance, or that violations can be alleviated or corrected by consultations or via some form of pressure, if necessary. This is a reflection of the unsound assumption that weapons are “not tools dearly bought to accomplish ends for the sake of which foreign leaders are willing to kill and die,

⁹ Faris, “Tailoring Deterrence: What and Why?,” op. cit.

¹⁰ J.D. Crouch, Nuclear Strategy Forum Remarks, “Challenging the Arms Control Mythology: A Century of Experience,” September 2025, available in *Journal of Policy & Strategy*, Vol. 6, No. 1 (April 2026), <https://nipp.org/wp-content/uploads/2026/04/Proceedings-September-2025.pdf>.

but rather, that they are expensive burdens that these leaders would prefer to shed.”¹¹ If weapons that violate agreements are unconnected to leaders’ geopolitical goals, a symbolic punishment or even public opinion pressure will make countries give them up, the fallacious reasoning goes.

However, this reasoning is historically unsound, because authoritarian states do not care about compliance to the degree democracies do, particularly when treaties regulate weapons these states consider necessary to achieve their political objectives. The principle that treaties must be obeyed (*pacta sunt servanda*) has a meaning in Washington far different from that in Hitler’s Berlin, Moscow, Beijing, Tehran, and Pyongyang. Nevertheless, Washington typically negotiates as if they all shared the same understanding and willingness to restrict their actions based on a formal agreement. Washington’s propensity for idealism and mirror imaging, and optimistic political investment in arms control prevent it from speaking out honestly about violations and increasing threats until the evidence is undeniable and response utterly necessary. In this process, democracies often lose precious time that could have been devoted to countering the threat while it was more manageable.

Germany was violating provisions of the Versailles Treaty the day the treaty was signed in 1919. Shortly thereafter Japan and Germany built significantly over the tonnage permitted by the Washington Naval Agreements with very few consequences for their violations. The Soviet Union has pushed agreements to their limits and often deployed larger forces than agreements permitted or violated them outright when it suited its interest. Moscow’s violations rarely incurred substantive costs for the violator.

Democratic governments have historically found it extremely difficult to bring determined violators back into compliance with their treaty obligations. This is partly because democratic leaders become invested in the arms control status quo as soon as they get elected. No government wishes to tell the voters they are potentially less safe under its aegis than before. The resulting dynamic sees aggressors’ violations diminished in the public discourse, and those who question the conciliatory approach in the face of another party’s violations are often labeled as alarmists, if not enemies of arms control and peace.

Implementing Long-Overdue Corrections

The United States ought to take the steps below to correct the pathologies in its arms control thinking. Should the United States fail to do so, the nation and its allies would be better off without arms control. Arms control processes and treaties or agreements that do not correct for these long-standing pathologies would leave Washington disadvantaged vis-à-vis revisionist adversaries who are willing to disregard their arms control obligations and use weapons to advance their goals in opposition to U.S. and allied interests.

¹¹ Malcolm Wallop and Angelo M. Codevilla, *The Arms Control Delusion* (Institute of Contemporary Studies, 1987), p. 42.

Create a Red Team for the Arms Control Process

In arms control endeavors, the United States must devise mechanisms to guard against unwarranted idealism, mirror imaging and its related foolish expectations of “action-reaction” and opponents’ arms control compliance, and a political investment in the process that works against calling out arms control failures. These misconceptions lead to misguided and harmful arms control practices and are the major driver behind the continued failure of arms control to meet its proponents’ expectations and promises. The pathologies must be consciously guarded against, or the United States and its allies will find themselves consistently disadvantaged against revisionist, hostile, and better-armed adversaries.¹²

At a minimum, every U.S. arms control negotiation should be advised by a red team specifically designed to watch for the pathologies at play analyzed in this analysis piece. Arms control negotiations ought to start with a solid analysis of the other states’ political objectives and due consideration of the connection between weapons to be subjected to arms control and political objectives they are meant to advance. The connections between arms and opponents’ political objectives are vastly more important in an arms control process than the weapons’ technical characteristics that the arms control process traditionally tends to dwell on, and is much more analytically demanding.¹³

Tailor Arms Control

Realistic analyses of the connection between arms and other parties’ strategic goals, and the low priority that opponents place on compliance should inform U.S. arms control goals and practices. U.S. arms control goals and practices must be “tailored” to the character of opponents no less than deterrence, and for the same reasons.¹⁴ Opponents will differ in material ways, and an approach to arms control predicated on the usual mirror-imaging pathologies will likely doom the outcome of the process.

In the absence of such an informed practice, it is misguided to measure the success of arms control negotiations by the achievement of an agreement. Setting the conclusion of an agreement as the standard of success essentially denies the significance of the opponent’s character and the specific content of the agreement. It also creates an environment in which continued quietude regarding noncompliance is prized above seriously exploring all options to adjust for the other party’s noncompliance.

¹² Keith B. Payne, “A Fading Western Alliance System? Who Is to Blame and Why Should We Care,” *Information Series*, No. 662 (Fairfax, VA: National Institute Press, June 8, 2026), https://nipp.org/information_series/keith-b-payne-a-fading-western-alliance-system-who-is-to-blame-and-why-should-we-care-no-662-june-8-2026/.

¹³ Keith B. Payne, “Deterrence is Not Rocket Science: It is More Difficult,” *Information Series*, No. 527 (Fairfax, VA: National Institute Press, July 6, 2022), https://nipp.org/information_series/keith-b-payne-deterrence-is-not-rocket-science-it-is-more-difficult-no-527-july-6-2022/.

¹⁴ Faris, “Tailoring Deterrence: What and Why?,” *op. cit.*; and Keith B. Payne, “Nuclear Deterrence In a New Era: Applying ‘Tailored Deterrence,’” *Information Series*, No. 431 (Fairfax, VA: National Institute Press, May 21, 2018), https://nipp.org/information_series/payne-keith-b-nuclear-deterrence-in-a-new-era-applying-tailored-deterrence-information-series-no-431/.

Countries hostile to U.S. interests will not consent to agreements that meaningfully limit their capabilities if those capabilities are useful for advancing their priority interests. That is why eminent strategist Colin S. Gray observed that arms control is either impossible, or unimportant: “The political antagonism that generates the objective need for alleviation via arms control—always assuming, again fallaciously, that arms control could control—is the very reason why arms control must fail....”¹⁵

U.S. arms control goals and practice should be informed by an acute understanding of the other party’s priority goals and hostility toward the United States, and how misinformed U.S. arms control enthusiasms can advance their goals. Arms control, as typically practiced by Washington, will be misguided and unable to achieve anything fundamentally helpful with countries that are openly hostile to U.S. interests. This, of course, is why U.S. arms control must be tailored by an unvarnished understanding of opponents, untainted by the pathologies discussed here, and rank idealism.

Realize that Arms Control Disproportionately Impacts Democracies

Arms control impacts democracies differently than it does authoritarian regimes, because democracies seek to abide by arms control treaties while autocracies often will not, leaving compliance asymmetry that often disadvantages democracies. The United States should refrain from investing significant political capital in the arms control process and welcoming a signature of arms control agreements with unwarranted visibility and expectations. Both of these dynamics work against a prompt publication of concerns with another party’s noncompliance and violations, particularly if they happen on the watch of a government that concluded agreements with violators in the first place. Giving less prominence to the process would make it easier to discuss compliance concerns and violations earlier on.

Congress should also demand a detailed analysis of most likely compliance issues and violations, and require that the administration articulates concrete consequences for instances of noncompliance and violations. While such a document cannot be binding on future Congresses and administrations, ideally, it would serve as a natural follow-up point for a discussion about their consequences after detecting noncompliance and violations. The ideal would be that the government exercises more effort imposing consequences for noncompliance and violations than debating whether they happened in the first place.

The compliance asymmetry is evident with regard to the United States stopping all nuclear warhead testing and yield-producing experiments in the 1990s following President Clinton’s signature of the CTBT, a multilateral treaty which the Senate rejected after a full floor debate, as stated above. Since then, the United States lost much of the warhead development and production skills and capabilities.¹⁶ Russia and China did not bind

¹⁵ Colin S. Gray, *Weapons Don’t Make War* (Lawrence, Kansas: University Press of Kansas, 1993), p. 174.

¹⁶ Mark B. Schneider, “The Enormous Costs of ‘Science Based Stockpile Stewardship’ for Nuclear Weapons,” *RealClearDefense*, January 7, 2025, https://www.realcleardefense.com/articles/2026/01/07/the_enormous_costs_of_science_based_stockpile_stewardship_for_nuclear_weapons_1157136.html.

themselves by similar restrictions, despite signing the CTBT and, as a result, their respective nuclear warhead production complexes are likely much more capable of producing new nuclear warheads than is the U.S. nuclear warhead complex.

The United States must reconstitute flexibility and resilience within the nuclear weapons complex so as to respond in a more timely way to opponents' arms control violations. Washington should proceed with greater urgency to reconstitute its ability to produce more plutonium pits (substantially more than the current program of 80 per year). The United States should be able to conduct a fully instrumented nuclear test within the next two years.¹⁷ It also ought to expand the Stockpile Responsiveness Program to help reconstitute skills necessary for developing nuclear warheads with new military capabilities should the United States decide such capabilities are necessary to strengthen deterrence.

Conclusion

Arms control will continue to be a part of national security discussions for years to come. In the future, the United States must not repeat mistakes of the past, namely approaching arms control with the same vapid misconceptions and pathologies that have historically proven wrong. The 1990s were supposed to bring the new era of globalization and interconnectedness which were to lead to the "end of history," an era of international cooperation that transcends national interests and obviates the need for arms—a new world order. This was an illusion.

Yet, the United States continued the arms control process based on fallacies that predate the end of the Cold War, and in some cases predate the Cold War by decades. As a consequence, the United States today is less equipped to counter its revisionist adversaries and uphold its extended deterrence commitments. If the United States will not correct the flawed misconceptions that have gained prominence within the arms control discourse over the past several decades—its arms control pathologies—U.S. negotiations will be doomed to the same misguided approaches that have created or magnified U.S. national security problems both recently and in decades past.

While there are no easy institutional solutions to overcome these established arms control misconceptions, a broader awareness of these enduring problems is a necessary beginning to avoid falling into the same traps. As typically practiced to date, the United States is likely to be more secure without arms control treaties; they do not fundamentally alter the challenges it faces from revisionist powers bent on changing the status quo, and they disproportionately restrain law-abiding democracies. There should be no rush to negotiate another arms control agreement.

¹⁷ Thomas Scheber, *A Responsive Nuclear Warhead Infrastructure: What Still Needs to Be Done? Why Is Responsive Infrastructure More Urgent Now Than in the Past?*, *Occasional Paper*, Vol. 5, No. 8 (Fairfax, VA: National Institute Press, August 2025), <https://nipp.org/wp-content/uploads/2025/08/Vol.-5-No.-8.pdf>.

To paraphrase Senator Ben Sasse, arms control treaties will not bring about heaven, and their lack will not cause hell.¹⁸ In fact, avoiding the investment in misguided arms control removes an institutional obstacle to calling out adversaries for what they are, and could contribute to strengthening the case for necessary U.S. nuclear and conventional weapons modernization and missile defense programs. Without these, it will be extremely difficult, if not impossible, to keep peace in the future.

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¹⁸ Ross Douthat, "How Ben Sasse Is Living Now That He Is Dying," *The New York Times*, April 9, 2026, <https://www.nytimes.com/2026/04/09/opinion/ben-sasse-death-pancreatic-cancer.html>.



ANALYSIS

YPRES AND THE COLLAPSE OF CHEMICAL DETERRENCE

John Mark Mattox

Introduction

Since the dawn of the nuclear age, the default conception of deterrence has typically been expressed in terms of nuclear weapons. While this is understandable, it also obscures the reality that the concept applies, to a greater or lesser degree, to every kind of weapon. Indeed, the idea behind weapon possession in the first instance is to force an adversary to consider that aggressive action could result in the use of that weapon in ways, and at a cost, which the adversary would consider unacceptable. Prior to 1945—before the concept of nuclear Armageddon existed, nations considered as “unacceptable,” or at least unseemly, things that would likely seem quaint today, such as breaches of diplomatic undertakings, ungentlemanly battlefield conduct or precipitation of prohibitively expensive arms races. In the days of European empires united by bonds of blood or marriage, such things cast a pall upon national honor and, as a result, exerted a deterrent effect. It is in this milieu that chemical weapon deterrence both took shape and experienced a spectacular collapse during World War I at Ypres, Belgium. Both the shaping and the collapse of chemical weapon deterrence afford timely lessons for students of deterrence in the 21st century. In particular, the use of chemical weapons at Ypres serves as an important case study on the limits of international law, ethics, and humanitarian motivations as contributors to the general reliability and staying power of deterrence, regardless of the type of weapon to which it is applied.

Early Modern Chemical Deterrence

While chemicals have been weaponized since antiquity, formal efforts to deter chemical weapon use in the modern understanding begins, for all practical purposes, in 1868. By the mid-19th century, Napoleonic-style warfare, with its tight columns and ranks of marching formations designed for bayonet charges and short-range volley fire (50–100 meters) was giving way to somewhat looser formations of troops able to deliver rifled musket fire with ranges of up to 300 meters or more. At the same time, advances in rifle ammunition made possible the delivery of increasingly devastating effects on human targets. Of special concern was the hollow rifle bullet, an early version of which was developed by the Imperial Russian Army. The first such bullets were designed to ignite on contact with solid targets, but subsequent developments enabled them to ignite on contact with soft targets, such as human tissue. In an historically uncharacteristic display of humanitarianism, the Imperial Russian War Minister forbade their use against all but solid targets: “Apart from the blast itself, which inevitably caused serious injury in human tissue, the expanding gases and the scattering of the casing fragments, significantly aggravated the victims’ condition, making an agonising



death inevitable.”¹ Moreover, without some kind of intervention, proliferation of the new, devastating technology was likewise inevitable.

Acting on the theory that there are certain things that “civilized” nations simply should not do to other civilized nations, Czar Alexander II invited 17 states² to consider proscription of this emergent technology. After only three days of deliberation, all 17 invitees signed a declaration in which they agreed “mutually to renounce, in case of war among themselves, the employment by their military or naval troops of any projectile of a weight below 400 grammes, which is either explosive or charged with fulminating or inflammable substances.”³ This modest step forward achieved several things: First, it served as a foundation stone, in company with the 1863 Lieber Code and the 1864 Geneva Convention, for international humanitarian law. Second, because of its reference to “fulminating or inflammable substances,” it marked the first step toward what would become a series of ever-more specific and far-reaching prohibitions on the use of chemicals in warfare. However, it also achieved a third effect which, although no less important, is easily overlooked: It aimed to deter the use of chemicals in warfare on pain of being considered an international pariah. Deterrence was the primary aim; for, even if a party to the treaty lacked humanitarian sensibilities, if that party were deterred from the actual use of chemicals in warfare, the treaty’s purpose would be accomplished.

In 1874, the Brussels Declaration, also initiated by Russia, memorialized among 15 European states the prohibition of 1868 and banned “The employment of arms, projectiles or material calculated to cause unnecessary suffering.”⁴ While it was not ratified as an instrument of international law, its moral effect clearly underwrote a foundational concept of what was shaping up to be chemical weapons deterrence: the fact that such weapons would produce excessive human harm outside the scope of permissible battlefield action. Even without ratification, the aim was to reinforce such deterrent effect as the 1868 declaration generated.

This deterrent effect received additional impetus in 1880 when the Institute of International Law at Oxford proscribed “arms, projectiles, or materials of any kind calculated to cause superfluous suffering, or to aggravate wounds—not only projectiles of less weight than four hundred grams which are explosive or are charged with fulminating or

¹ “St Petersburg, 1868: First International Agreement Prohibiting the Use of Certain Weapons,” *Online Atlas on the History of Humanitarianism and Human Rights*, https://hhr-atlas.ieg-mainz.de/articles/jevglevskaja-st_petersburg.

² Austria-Hungary, Bavaria, Belgium, Denmark, France, Great Britain, Greece, Italy, The Netherlands, Persia, Portugal, Prussia and the North German Confederation, Russia, Sweden and Norway, Switzerland, The Ottoman Empire (Turkey), and Württemberg. The United States, which was not yet considered to be a major player in international military affairs, was not invited. See “A Look at the Declaration of St. Petersburg of 1868,” *International Review of the Red Cross*, <https://international-review.icrc.org/sites/default/files/S0020860400082188a.pdf#:~:text=At%20the%20invitation%20of%20Tsar%20Alexander%20n%2C,General%20Milutin%2C%20the%20Tsar%27s%20Minister%20of%20War>.

³ “Declaration Renouncing the Use, in Time of War, of Explosive Projectiles under 400 Grammes Weight. Saint Petersburg, 29 November / 11 December 1868,” <https://ihl-databases.icrc.org/assets/treaties/130-IHL-6-EN.pdf>.

⁴ “Project of an International Declaration concerning the Laws and Customs of War. Brussels, 27 August 1874,” *International Humanitarian Law Databases*, <https://ihl-databases.icrc.org/en/ihl-treaties/brussels-decl-1874>.

inflammable substances” but also the “use of poison, in any form whatever.”⁵ These proscriptions were as much anticipatory as they were historically informed; for although poison had been used in warfare from time immemorial, the technology that would make wartime use of poison synonymous with “chemical warfare” was still decades in the future.

The 1899 and 1907 Hague Conventions (the first such conventions to which the United States was a party) took fuller cognizance of the shape that emerging chemical technology might assume. Up to this point, it seemed as though the force of moral revulsion and insistence on gentlemanly warfare (coupled with the somewhat more mundane, but no less pressing mutual desire to avoid spiraling national defense budgets), would be sufficient to deter chemical weapon use. However, some were starting to question this conventional wisdom concerning what could actually be counted upon to deter the use of a specific kind of weapon; and on this point, the United States led the way. U.S. Navy Captain Alfred Thayer Mahan, deputy plenipotentiary of the U.S. delegation, is on record as having expressed that:

The objection that a war-like device is barbarous has always been made against all new weapons, which were nevertheless eventually adopted.

In the Middle Ages firearms were criticized as being cruel, and later on mortars and still more recently torpedoes received the same accusation. In his opinion it does not seem demonstrated that projectiles containing asphyxiating gases would be an inhuman or cruel device without being decisive.⁶

While he is the representative of a country which cherishes a keen desire to render warfare more humane, he also represents a nation which may be compelled to wage war, and it is therefore a question of not depriving oneself, by means of resolutions hastily reached, of means which later on might be usefully employed.⁷

Mahan’s point is clear: Gentlemanliness, even that clothed in robes of humanitarian sensibilities, simply could not be counted upon for deterrent effect if a certain kind of weapon—any weapon—were viewed as conferring special advantage in actual conflict.

⁵ “Manual Adopted by the Institute of International Law at Oxford, 9 September 1880,” <https://ihl-databases.icrc.org/en/ihl-treaties/oxford-manual-1880>.

⁶ Puleston renders the phrase “without being decisive” as “and that they cannot produce decisive results.” See W. D. Puleston, *The Life and Work of Captain Alfred Thayer Mahan, U.S.N.* (London: Jonathan Cape, 1939), 204. This seems correct despite the disclaimer, contained in the official record of the conference proceedings, that “Mr. Mahan asks permission to change, both in the minutes approved May 31 and in the report of Count Soltyk, the expression “or uselessly cruel” into “cruel without being decisive,” which change was adopted by the commission. *The Proceedings of the Hague Peace Conferences: Translation of the Official Texts: The Conference of 1899* (New York: Oxford University Press, 1920), p. 375.

⁷ *The Proceedings of the Hague Peace Conferences: Translation of the Official Texts: The Conference of 1899* (New York: Oxford University Press, 1920), p. 296. Note that the official record is a third-person account of Captain Mahan’s remarks.

World War I

Indeed, it is precisely the reality of what Mahan predicted that made chemical weapon use an appealing alternative for Imperial Germany in 1915. The war began in August of 1914 and was to end, in words widely attributed to Kaiser Wilhelm II, “before the leaves fall from the trees.”⁸ The leaves had fallen, the German advance had bogged down into trench warfare, winter had come and gone, and still there was no prospect of war’s end in sight. Moreover, there was no expectation—or even any idea—from the vantage point of August 1914 that Germany would turn to chemical warfare (certainly, the Schlieffen Plan did not require it). In principle, chemical weapon deterrence was supposed to hold for all of the traditionally accepted reasons; in practice, it did not.

In late afternoon of 22 April 1915, at the beginning of what became known as the Second Battle of Ypres, the German army released over 400 tons of chlorine gas from 6000 cylinders secreted along a salient in the Western front near Ypres, Belgium. That release sent a dense, 50-foot-high yellow-green cloud drifting toward Allied positions along a roughly four-mile sector of the line. While casualty figures vary significantly and—especially early on—were almost certainly inflated for propaganda purposes, some of the best retrospective estimates include roughly 6000–7000 immediate gas casualties and over 1100 deaths.⁹ The chemical deterrence regime built up over the preceding half-century—and with it, assumptions about the deterrent effect of existing notions of honor—had failed. In the words of one British Company Sergeant Major (whose sentiment is repeated in scores of existing accounts): “Had we lost as heavily while actually fighting we would not have cared as much, but our dear boys died like rats in a trap, instead of heroes as they all were.”¹⁰ As if to leave no doubt that, certainly in the minds of the rank and file at least, chemical deterrence was now a thing of the past, the Sergeant Major continues: “The Dorset Regiment’s motto now is, ‘No prisoners’. No quarter will be given when we again get to fighting.”¹¹

So much for gentlemanliness.

That the Western Alliance swiftly decried Germany’s destruction of the chemical deterrence regime is unremarkable. What *is* remarkable is Germany’s response:

- Germany, not the Western Alliance, was the victim here. Germany didn’t introduce chemical warfare; France did, through its use (albeit limited and unsuccessful) of lachrymatory grenades in autumn of 1914. In a translated excerpt of what *The [London] Times* described as “a jubilant leading article,” the *Frankfurter Zeitung* reported:

⁸ Barbara W. Tuchman, *The Guns of August* (New York, NY: Ballantine Books, 2004), p. 141.

⁹ See, for example, “History of United States’ Involvement in Chemical Warfare,” DoD Recovered Chemical Warfare Material (RCWM) Program, <https://www.denix.osd.mil/rcwmprogram/history/>; James Patton, “Medicine in the First World War,” University of Kansas School of Medicine, <https://www.kumc.edu/school-of-medicine/academics/departments/history-and-philosophy-of-medicine/archives/wwi/essays/medicine/gas-in-the-great-war.html>.

¹⁰ John Lee, *The Gas Attacks at Ypres 1915* (South Yorkshire, England: Pen & Sword Books Ltd., 2009), p. 78.

¹¹ Ibid.

It is quite possible that our bombs and shells made it impossible for the enemy to remain in his trenches and artillery positions, and it is even probable that missiles which emit poisonous gases have actually been used by us, since German leaders have made it plain that, as an answer to the treacherous missiles which have been used by the English and the French for many weeks past, we too shall employ gas bombs or whatever they are called.¹²

- Germany did not actually violate any international law, since the prohibition was against “the use of projectiles the sole object of which is the diffusion of asphyxiating or deleterious gases”¹³, and the gas used at Ypres was released from pressurized cylinders.
- Nothing about Germany’s use of gas should have surprised anyone, as it was simply one of the ordinary usages of war which a recognized belligerent should have anticipated and against which it should have taken prudent defensive measures:

What The Hague Convention desired to prevent was the destruction without chance to escape of [sic] human lives *en masse*, which would have been the case if shells with poisonous gas were rained down on a defenceless enemy who did not see them coming and was exposed to them irremediably.¹⁴

Moreover, all an enemy really had to do was “to withdraw to escape their effects.”¹⁵

- Germany’s decision to use gas was, in any case preemptive: Reports “published in American newspapers” stated “that the Lusitania carried 250,000 pounds of tetrachloride of tin consigned to the French Government and intended for the production of asphyxiating gases”¹⁶.
- The idea that gas warfare was less humane than the commonly accepted modes of warfare was ludicrous:

The basic idea of the Hague agreements was to prevent unnecessary cruelty and unnecessary killing when milder methods of putting the enemy out of action suffice and are possible. From this standpoint the letting loose of smoke clouds, which, in a gentle wind, move quite slowly towards the enemy, is not

¹² “Through German Eyes. Poisonous Gases. A Quick and Painless Death,” *The Times* (London), April 29, 1915, p. 6.

¹³ *The Proceedings of the Hague Peace Conferences: Translation of the Official Texts: The Conference of 1899*, Vol. 1 (New York: Oxford University Press, 1920), p. 266.

¹⁴ “German Defence of Gas,” *The Times* (London), June 28, 1915, p. 10.

¹⁵ “Says Allies Used Gas before Germans Did,” *New York Times*, June 26, 1915, p. 2, <https://timesmachine.nytimes.com/timesmachine/1915/06/26/issue.html>.

¹⁶ *Ibid.*

only permissible by international law, but it is an extraordinarily mild method of war.¹⁷

- The onward movement of military technology is inexorable: “The changing forms of warfare make new methods of war continually necessary.”¹⁸ Ergo, “The science of war must draw its conclusions from the conditions of trench warfare.”¹⁹

However aghast gentlemen may have been at Germany’s reply, the strategic message was plain: Chemical weapon deterrence was over, without any expectation of its restoration as long as the current state of affairs obtained.

Prominent voices in the Imperial Army had expressed misgivings on moral as well as prudential grounds. On 1 March 1915, German 6th Army commander Crown Prince Rupprecht of Bavaria recorded in his diary that:

I made no secret of the fact that this new means of warfare—gas—struck me as not only repugnant but also ill-advised for, I argued, it was safe to assume that if it proved effective, the enemy would resort to the very same measure, and . . . would be able to unleash gas against us ten times more frequently than we could against them.²⁰

In short, neither personal morality nor national honor would prove sufficient to deter the use of chemical weapons after Ypres. That view is echoed by German Imperial Army officer and author Rudolf Binding, who wrote in his diary two days after the attack: “The effects of the successful gas attack were horrible. I am not pleased with the idea of poisoning men. Of course, the entire world will rage about it at first and then imitate us.”²¹

After Ypres

And imitate them they did. By war’s end, some 125,000 tons of toxic gas had been used in battle by Germany, France, Great Britain, the United States, Russia, Austria, and Italy—about 54% of the whole by Germany’s enemies.²² However, the “war to end all wars”²³ not only did not end war, it also did not end the use of chemical weapons.

In an effort to restore chemical deterrence, the Treaty of Versailles forbade the manufacture in, and importation into, Germany of “asphyxiating, poisonous or other gases

¹⁷ “German Defence of Gas,” *The Times* (London), June 28, 1915, p. 10.

¹⁸ *Ibid.*

¹⁹ *Ibid.*

²⁰ Kronprinz Rupprecht von Bayern, *Mein Kriegstagebuch*, ed. Eugen von Frauenholz, 3 Vols. (Berlin, 1929), 1:305, <https://babel.hathitrust.org/cgi/pt?id=wu.89032264574&seq=351>. Translation by the author and confirmed by AI.

²¹ Rudolf Binding, *A Fatalist at War*, trans. Ian F. D. Morrow (Boston: Houghton Mifflin, 1929), p. 64, <https://archive.org/details/fatalistatwar00bind/page/64/mode/2up?q=imitate>.

²² Augustin M. Prentiss, *Chemicals in War: A Treatise on Chemical Warfare* (New York: McGraw-Hill, 1937), p. 654.

²³ The phrase “the war to end war” was coined by H.G. Wells in 1914, and President Woodrow Wilson is typically credited with having popularized the related phrase “the war to end all wars.”

and all analogous liquids” as well as “materials specially intended for the manufacture, storage and use of the said products or devices.”²⁴ The 1925 Geneva Protocol asserted that “the use in war of asphyxiating, poisonous or other gases, and of all analogous liquids, materials or devices, has been justly condemned by the general opinion of the civilised world”; and its signatories agreed “that this prohibition shall be universally accepted as a part of International Law, binding alike the conscience and the practice of nations.”²⁵

However, such deterrent effect as these declarations may have produced was far from complete. After the First World War, Spanish forces used chemical weapons on a large scale in the Rif War in Morocco (1921–1926), and German companies covertly supplied Spain with chemical agents, plant construction assistance, and technical expertise, allowing elements of the German chemical-warfare establishment to bypass Versailles-era restrictions by working through Spain.²⁶ German Army figures, including “General Max Bauer, who had used all his influence in support of gas warfare, especially with Generals Erich von Falkenhyn (chief of general staff during the war) and Erich Ludendorff”²⁷ operated quietly but deliberately in the background; and Germany gained “[c]onsiderable experience . . . not only in developing and manufacturing the chemicals but also in deploying them.”²⁸ Still other German Army leaders actively planned for the construction of clandestine chemical weapon plants “in a district [of Germany] that would not be exposed to enemy air attacks to the same extent as the current industrial plants in western Germany.”²⁹ German industrialists also invested in building chemical weapons plants in the Soviet Union. Although these investments proved to be financially ruinous, it is nevertheless the case that they were built—demonstrating not only that key German figures involved in World War I chemical weapon development and provision felt no need to repent of anything; that chemical deterrence had failed, but that was all right.

In June 1936, Emperor Haile Salasie of Ethiopia, the first Head of State to address the Assembly of the League of Nations, denounced before the world Italian use of chemical weapons against his country:

Special sprayers were installed on board aircraft so that they could vaporize, over vast areas of territory, a fine, death-dealing rain. Groups of nine, fifteen, eighteen aircraft followed one another so that the fog issuing from them formed a continuous sheet. It was thus that, as from the end of January, 1936, soldiers, women, children, cattle, rivers, lakes and pastures were drenched continually with this deadly rain. In order to kill off systematically all living creatures, in order to more surely to

²⁴ Treaty of Versailles, June 28, 1919, art. 171, p. 119.

²⁵ League of Nations, *Conference for the Supervision of the International Trade in Arms and Ammunition and in Implements of War: Convention; Declaration Regarding the Territory of Ifni; Protocol on Chemical and Bacteriological Warfare; Protocol of Signature; Final Act*, Signed at Geneva, June 17, 1925, p. 37.

²⁶ Dietrich Stoltzenberg, *Fritz Haber: Chemist, Nobel Laureate, German, Jew* (Philadelphia: Chemical Heritage Press, 2004), p. 163.

²⁷ *Ibid.*, p. 164.

²⁸ *Ibid.*

²⁹ *Ibid.*, p. 167.

poison waters and pastures, the Italian command made its aircraft pass over and over again. That was its chief method of warfare.³⁰

It was, Selassie said, “[t]he very refinement of barbarism” which “consisted in carrying ravage and terror into the most densely populated parts of the territory, the points farthest removed from the scene of hostilities.”³¹ What had been the disputed—or at most, collateral—effect on noncombatants in The Great War was now on full, remorseless, and *undeterred* display. Selassie continues:

The object was to scatter fear and death over a great part of the Ethiopian territory. These fearful tactics succeeded. Men and animals succumbed. The deadly rain that fell from the aircraft made all those whom it touched fly shrieking with pain. All those who drank the poisoned water or ate the infected food also succumbed in dreadful suffering. In tens of thousands, the victims of the Italian mustard gas fell.³²

Chemical weapon use was averted in World War II, but only because, this time, credible deterrent threats against chemical weapon use actually did point to outcomes that would-be users deemed unacceptable. As the United States considered Japan rather than Germany to be the greater threat vis-à-vis chemical warfare, Roosevelt solemnly stated in 1942,

I desire to make it unmistakably clear that, if Japan persists in this inhuman form of warfare against China or against any other of the United Nations, such action will be regarded by this Government as though taken against the United States, and retaliation in kind and in full measure will be meted out. We shall be prepared to enforce complete retribution. Upon Japan will rest the responsibility.³³

In the same year, Churchill, for whom Germany was naturally the principal chemical threat, similarly warned that if Germany “used poison gas against Russia, the same weapon would be adopted by the R.A.F. against Germany”—“that Britain was firmly resolved not to use that odious weapon unless it was first used by Germany” but “that it was for Hitler to choose whether or not he wished to add this additional horror.”³⁴

By 1963, the argument was being made that “the use of gas and other chemicals, once branded as inhuman, may soon find employment as an alternative to devastating nuclear weapons” for two reasons: first, “the West’s need for modernizing non-nuclear war forces” and second, “the difficulties of countering guerrilla war operations by an enemy that has

³⁰ Haile Selassie, Appeal to the League of Nations, June 1936, <https://www.mtholyoke.edu/acad/intrel/selassie.htm#:~:text=%22I%2C%20Haile%20Selassie%20I%2C,in%20violatio,n%20of%20international%20treaties.>

³¹ Ibid.

³² Ibid.

³³ Franklin D. Roosevelt, “Statement on Japanese Use of Poison Gas,” June 5, 1942, *The American Presidency Project*, <https://www.presidency.ucsb.edu/documents/statement-japanese-use-poison-gas>.

³⁴ “Churchill’s Grave Warning to Germany: Britain Will Retaliate Immediately if Gas Used,” *Canberra Times*, May 12, 1942, p. 1.

unlimited manpower to expend in the field.”³⁵ While chemical weapons had not lost their stigma, efforts during the past decade to rehabilitate their image had been significant, raising the specter that chemical weapons should be not be objects of deterrence any more than any conventional weapon. Besides, Cold War tensions over nuclear weapons—which were the objects of deterrence *par excellence*—arguably called for consideration of whether war that included chemical weapons were not, in fact, an appropriate substitute for nuclear war. Calls for “tactical” nuclear weapon use in Vietnam immediately brought a chorus of concerns over what was regarded as almost certain nuclear escalation. Hence, as one commentator argued “The grave peril in which free world countries find themselves, especially in South-East Asia, points out the imperative need for the West’s re-examination of an outmoded and illogical position on chemical warfare.”³⁶

Whether as the result of “re-examination” or not, the war in Vietnam in fact “saw the largest scale use of chemicals in combat of any modern conflict”³⁷—this time in the form of riot control agents and defoliants. Riot control agents were argued to be an unquestionably more humane response to crowd control than shooting into the crowd,³⁸ and defoliants were viewed as a reasonable way to expose the enigmatic trails of the Vietcong—even though both tools produced significant collateral damage. Deterrence arguments vis-à-vis chemical weapons seemed altogether to lose their force, as there was arguably no enemy use to deter and only advantage to gain.

Even so, in 1966, the United States sponsored a UN General Assembly resolution calling for “strict observance by all States of the principles and objectives” of the 1926 Geneva Protocol and condemned “all actions contrary to those objectives.”³⁹ The vote effectively established “that the prohibition of chemical warfare as layed [sic] down in the Geneva Protocol constitutes ‘*ius cogens*’ for all States,” i.e., “a rule of customary international law, binding all nations alike.”⁴⁰ At the same time, however, it served as a convenient fig leaf for the United States, which continued to use both. As a result, vocal opponents of U.S. chemical use in Vietnam may have been partially placated, but no genuine deterrence against that use was meaningfully achieved.

³⁵ Anthony Harrigan, “The Case for Gas Warfare,” *Royal United Services Institution Journal* 108, no. 632 (1963): 356, doi:10.1080/03071846309429740.

³⁶ *Ibid.*, p. 357.

³⁷ Valerie Adams, *Chemical Warfare, Chemical Disarmament* (Bloomington: Indiana University Press, 1990), p. 73.

³⁸ United States, *Rules of Engagement for the Employment of Firepower in the Republic of Viet-Nam*, US Military Assistance Command Viet-Nam, Directive 525-13, May 1971, in Eleanor C. McDowell, *Digest of United States Practice in International Law*, 1975, US Department of State Publication 8865 (Washington, DC, 1976), pp. 814–815, § d(2), quoted in “Rule 75. Riot Control Agents as a Method of Warfare,” <https://ihl-databases.icrc.org/en/customary-ihl/v2/rule75>.

³⁹ United Nations General Assembly, Resolution 2162 (XXI) B, *Question of General and Complete Disarmament*, [https://docs.un.org/en/A/RES/2162\(XXI\)](https://docs.un.org/en/A/RES/2162(XXI)).

⁴⁰ Wil D. Verwey, “Chemical Warfare in Vietnam: Legal or Illegal?,” *Nederlands Tijdschrift voor Internationaal Recht* 18, no. 2 (1971), p. 217, doi:10.1017/S0165070X00027510.

In 1988, Iranian Speaker of Parliament Hashemi Rafsanjani, identified chemical weapons as “the poor man’s atomic bombs.”⁴¹ This identification seemed to be justified in light of their appearance in, *inter alia*, the Yemen Civil War (1963–1967), in which Egypt deployed poison gas, possibly including nerve-agent-like substances;⁴² the Rhodesian Bush War (1976–1978), in which the Rhodesian regime deployed organophosphate pesticides such as parathion repurposed as a battlefield chemical weapon and thallium to poison guerrilla food and water;⁴³ the Iran-Iraq War (1980–1988), in which (primarily) Iraq repeatedly employed sulphur mustard and the nerve agents tabun and sarin in large-scale battlefield attacks, beginning with tear-gas-type riot-control agents and later escalating to lethal agents, resulting in over one million Iranian chemical-related casualties;⁴⁴ and the 1987 alleged deployment by Libya of chemical weapons (reported to include mustard-type agents) against Chad.⁴⁵ It also provided cover for use by the superpower Soviet Union which, during the Soviet-Afghan War (1979–1989), allegedly killed over 3,000 in 47 separate incidents between 1979 and 1981.⁴⁶ While some of these events generated concern on the international stage and diplomatic protest, none of them seriously influenced the trajectory of international discourse sufficient to truly deter chemical weapons use either by “poor man” or by superpower.

In contrast to the other mid-to-late 20th century state-sponsored chemical weapon events, the Iran-Iraq War stands out for several reasons: the fact that it was fought between two states with credible military capability, the length of the conflict, the scale of chemical weapon use (by far the largest combat use since World War I), and the number of chemical weapon casualties. Most infamously, on 16 March 1988, Iraqi dictator Saddam Hussein’s air forces bombarded the town of Halabja, in the Kurdish region of northwestern Iraq, for several hours with a mix of conventional and then chemical munitions (including mustard gas and nerve agents such as sarin and tabun) after Iranian and Kurdish forces had briefly taken the town. Common estimates place casualties at approximately 5,000 killed and 7,000–10,000 injured, the overwhelming number of which were Kurdish civilians including large numbers of women and children.⁴⁷ The helpless Kurdish civilians had no punishing retaliatory capability with which to threaten the Iraqis and, hence, no deterrence occurred.

⁴¹ “The World,” *Los Angeles Times*, October 20, 1988, <https://www.latimes.com/archives/la-xpm-1988-10-20-mn-5242-story.html>. This phrasing differs slightly from source to source, but the essence is the same.

⁴² W. Seth Carus, “Chemical Weapons in the Middle East,” *Policy Focus*, Research Memorandum no. 9 (Washington, DC: Washington Institute for Near East Policy, December 1988), p. 2, <https://www.washingtoninstitute.org/media/3670>.

⁴³ Matthew Turner, “Chemical and Biological Warfare during the Rhodesian Bush War,” *Small Wars Journal*, December 29, 2025, <https://smallwarsjournal.com/2025/12/29/rhodesian-bush-war/>.

⁴⁴ Nuclear Threat Initiative, “Fact Sheet: Iraq Chemical Overview,” July 27, 2015, <https://www.nti.org/analysis/articles/iraq-chemical/>.

⁴⁵ Joshua Sinai, “Libya’s Pursuit of Weapons of Mass Destruction,” *Nonproliferation Review* (Spring–Summer 1997), p. 92, <https://www.nonproliferation.org/wp-content/uploads/npr/sinai43.pdf>.

⁴⁶ Richard Halloran, “U.S. Accuses Soviet of Poisoning 3,000,” *New York Times*, March 9, 1982, p. A1, <https://www.nytimes.com/1982/03/09/world/us-accuses-soviet-of-poisoning-3000.html>.

⁴⁷ Nicole Hassenstab, “The Real Impact of Chemical Warfare,” November 21, 2024, *American University School of International Service News*, <https://www.american.edu/sis/news/20241121-the-real-impact-of-chemical-warfare.cfm>.

Moreover, neither the U.N. Security Council nor the major powers imposed serious costs (i.e., sufficient to restore deterrence) on Iraq. Iran tried to seize the initiative by waging an information campaign against Iraq, circulating in Western Europe color pamphlets depicting chemical casualties in Teheran hospitals. Iran even dispatched at least 50 chemical weapon casualties to nations throughout Europe to vividly portray the effects of chemical poisoning. Nevertheless, Iran's public relations campaign received little attention among Western nations. Most notably, Britain, France and the United States remained effectively silent, even as Iran charged Britain, France, and the Soviet Union with having supplied Iraq's chemical weapon program.⁴⁸ Certainly, the United States' private admonishment of Iraq⁴⁹ did not deter Iraqi chemical use; and that failure of deterrence was accentuated by Iraq's response through diplomatic channels to the United States: "The [Iranian] invaders should know that for every harmful insect there is an insecticide capable of annihilating it whatever their number and Iraq possesses this annihilation insecticide."⁵⁰

Each of these post-World War I uses of chemical weapons were against an enemy the user considered "uncivilized" or otherwise unworthy of life. The only case of major chemical use since World War I in which this was not the case was the Syrian Civil War, in which the Ba'athist regime of Bashar al-Assad Assad's military and affiliated militias were found to have "launched more than 300 chemical attacks."⁵¹ Moreover, "the Assad regime did not merely 'get away' with its use of these banned weapons, but succeeded in using them for strategic ends."⁵² While the attack was not dismissed as being against uncivilized or sub-human targets, the Syrian government achieved equivocation in another way: It "vowed never to use such weapons against a domestic enemy" while consistently depicting "the rebellion against Assad as a foreign-based 'conspiracy' hatched by Syria's enemies abroad, and not as an internal revolt."⁵³ Although the response of the world to the Assad regime was one of outrage, accommodation came without serious penalty (i.e., one that would have been sufficient to deter from action). Once again, chemical weapon deterrence failed.

The Chemical Weapons Convention—one of the most widely subscribed treaties in history—was intended to secure deterrence against chemical weapons once and for all. However, it proposed to do so on the same "gentlemanly" basis as chemical deterrence operated between 1868 and 1915, by naming and shaming, etc. However, even signatory

⁴⁸ Javed Ali, "Chemical Weapons and the Iran-Iraq War: A Case Study in Noncompliance," *Nonproliferation Review* (Spring 2001), p. 48, <https://www.nonproliferation.org/wp-content/uploads/npr/81ali.pdf>.

⁴⁹ Department of State to Baghdad Interests Section, "Deterring Iraqi Use of Chemical Weapons," November 10, 1983, in "Iraqi Use of Chemical Weapons," November 21, 1983, doc. 25, National Security Archive, George Washington University, <https://nsarchive2.gwu.edu/NSAEBB/NSAEBB82/iraq25.pdf>. Text in the original is in all capital letters.

⁵⁰ U.S. Interests Section Baghdad to Secretary of State, "Iraqi Warning of Iranian Offensive," February 22, 1984, doc. 41, National Security Archive, George Washington University, <https://nsarchive2.gwu.edu/NSAEBB/NSAEBB82/iraq41.pdf>.

⁵¹ Louisa Loveluck, "Syrian Army Responsible for Douma Chemical Weapons Attack, Watchdog Confirms," *The Washington Post*, January 27, 2023.

⁵² Tobias Schneider and Theresa Lütkefend, "Nowhere to Hide: The Logic of Chemical Weapons Use in Syria," Global Public Policy Institute Study, February 2019, GPPi_Schneider_Luetkefend_2019_Nowhere_to_Hide_Web.pdf.

⁵³ Patrick J. McDonnell, "U.N.'s Carla Del Ponte Says Syrian Rebels May Have Used Sarin," *Los Angeles Times*, May 6, 2013.

states that wish to skirt their treaty obligations can stretch out requests for compliance inspections for years, without meaningful consequence, if they wish to do so.

In short, the tools that both the pre- and post-Ypres world actually relied on to maintain chemical deterrence were (except for the World War II declarations of Roosevelt and Churchill) ineffective. Once lost at Ypres, chemical weapon deterrence was never truly restored. Hence, the fact that chemical weapons have not been used more than they have must be because nations have generally not seen any special advantage to be gained from their use—which, of course, is not the same thing as being *deterred* from their use.

Deterrence Lessons for the 21st Century

As the century since Ypres has demonstrated, nations—smaller powers, middle powers, and even superpowers—that felt they could use chemical weapons with impunity did so at will. That chemical weapons have not appeared in every conflict or gray zone action is hardly evidence that no nation who deemed it in its interest to do so and thought it could get away with it would be deterred from using chemical weapons. Certainly, the threat of a demand for an inspection of its alleged chemical sites by the Organisation for the Prohibition of Chemical Weapons (OPCW) would no more deter the use of chemical weapons than it did in Syria or Iraq.

By comparison, deterrence against nuclear weapons is reinforced by such propositions as “a nuclear war cannot be won and must never be fought;” “Iran must never be allowed to get a nuclear weapon,” etc., coupled with the implicit or explicit threat of unacceptably painful retaliation. However, deterrence against chemical weapons has operated under a somewhat different paradigm: The lengths to which a state is allowed to go are demonstrably farther, and the tolerance level for their activity on the part of other states is demonstrably higher. One may seek to dismiss the problem by arguing that chemical deterrence has been more-or-less successful since World War I (even though that argument would ring utterly hollow for those who have found themselves on the receiving end of chemical weapons). However, doing so risks missing what might well be *the* deterrence lesson of the 21st century: Many breaches of peace by any means other than nuclear weapons are, to one degree or another, deemed tolerable; and to the extent this is the case, deterrence of the use of that warfighting mechanism fails. Chemical weapons were, for all practical purposes, a “new” technology at Ypres, just as drones are, for all practical purposes, the “new” technology of today. Moreover, given unprecedentedly rapid advancements in technology, the ramifications of barely imagined but as yet unseen technologies may leave the world of today, with respect to those new technologies, in the place that the world was with respect to chemical weapons in 1868. If so, the coming decades might yield difficult problems for deterrence theory that have nothing whatsoever to do with nuclear weapons, but which fall somewhere below the threshold of tolerance.

This is particularly true in the case of yet unrealized weapons of mass destruction. In 1948, the United Nations defined “weapons of mass destruction” as

Atomic explosive weapons, radioactive material weapons, lethal chemical and biological weapons, *and any weapons developed in the future which might have characteristics comparable in destructive effect to those of the atomic bomb or other weapons mentioned above.*⁵⁴

In so doing, the United Nations explicitly acknowledged that it did not know what future war fighting technologies might appear. More importantly, this dimly lit vision into the future should alert the attentive observer to the reality that the strictures applied to deter existing technologies do not automatically transfer over to new ones. They certainly did not transfer in the case of chemical weapon use at Ypres and have not since—all treaties and proclamations of international norms notwithstanding. Both nuclear and chemical weapon use has supposedly been constrained by treaties. In the case of nuclear weapons, the treaties have largely disappeared, but deterrence has held; in the case of chemical weapons, the treaties have remained, but deterrence has ultimately failed. Why? Because in both cases, when deterrence succeeded, it is not the force of treaties; it was the credible threat of unacceptably painful retaliation.

Looking ahead, it is altogether reasonable to expect that nations will take, with respect to yet unrealized warmaking technologies, the same skeptical approach as Captain Mahan articulated in 1899 with respect to chemical weapons. It is likewise reasonable to expect that nations which avail themselves of these technologies will provide justifications eerily reminiscent of those given by Germany after Ypres. Unfortunately, as the case with chemical weapons demonstrates, the problems unleashed by use of these new technologies will not be dispensed with by merely signing treaties. Something far more potent will be required—something which looks awfully like deterrence as it has heretofore been successfully applied to nuclear weapons.

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⁵⁴ United Nations Commission for Conventional Armaments, *Report*, UN Doc. S/C.3/32, August 1948. Italics added.



ANALYSIS

REQUIREMENTS AND CHALLENGES FOR U.S. THEATER NUCLEAR CAPABILITIES*

Christopher A. Ford

The current international security environment places stresses upon America's nuclear deterrence policy in ways we haven't seen since at least the Cold War. This new pressure, in turn, is creating a "demand signal" for new U.S. theater-class nuclear weapons. This article sets forth the circumstances that create this signal, the author's view of some of the nuclear capability requirements that grow out of it, and some of the challenges we face in meeting those requirements.

The Demand Signal

There are at least four facets of the contemporary security environment that contribute to the current demand signal for augmented U.S. theater nuclear weapons capabilities. The first is that we have more near-peer theater adversaries today than ever before—specifically, two rather than just one. When it comes to high-end conflict and especially its nuclear aspects, the world is multipolar now, and this raises tremendous problems for us.

Second, this multipolarity is particularly problematic because it isn't symmetrical. In terms of the "sides" arrayed against each other in the geopolitical arena, our two near-peers both posture in ways quite adversarial to the United States, while yet remaining on quite good terms between themselves. (The phrasing China and Russia have sometimes used about a "no-limits partnership" overstates the case—for there clearly *are* some limits—but it still makes the basic point: *they view themselves as being together against us.*) Today's new environment of "multipolarity," in other words, isn't actually very *multipolar*; it's closer to a "two-on-one" problem than it is to a truly three-way game. And, unfortunately, *we* are the "one."

A third facet is the theater nuclear capacity we have lost, for we would still be behind the game even if this all *were* a more symmetrically three-body geopolitical interaction. Pleased that the waning of the Cold War seemed to make such things irrelevant, we dismantled most of our own theater-class capabilities—along with our shorter-range "battlefield"-type systems—decades ago. To be sure, they're not *all* gone, for we have a few left, some of which are forward deployed in Europe so as to be closer to the potential targets they would need to reach via manned tactical aircraft in a Russia scenario. Nonetheless, we have precious few of these, and they are only gravity bombs rather than any kind of sophisticated standoff

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capability. (Against the modern air defenses of a near-peer adversary, actually having to *fly up to or over a target* in a manned aircraft is, to put it charitably, not optimal.)

What little we have left is thus a capability that probably doesn't frighten (and hence deter) our adversaries too much, whereas *they* have either retained or built sizeable arsenals of theater-class systems that give them a wide and diverse range of capabilities, as well as a significant advantage in raw numbers. We may perhaps be able to rely upon sophisticated conventional capabilities to partially make up for *some* of this gap, and cross-domain deterrence can indeed be valuable. Nevertheless, conventional-nuclear substitution only goes so far, especially when our traditional post-Cold War advantages in conventional warfighting capacity are being so rapidly narrowed, especially by the Chinese. Moreover, even if we *were* to succeed in besting our adversaries on the battlefield with conventional might alone, the prospect of such a defeat might *itself* drive them into the limited use of nuclear weapons there to turn the tables against us—hence presenting us with escalation management challenges that we might be unable to meet without serious theater-class nuclear capabilities of our own.

Fourth, we are also making these lopsided multipolarity problems much worse for ourselves by weakening the alliance relationships upon which we would ordinarily be able to rely in meeting adversary threats through the *aggregated* power of U.S. friends and allies acting in concert with us. Too many people in Washington seem today to regard our allies and partners as nothing more than millstones around our neck and gifting free-riders who hide behind our military skirts while we do the heavy lifting of deterrence, but this is neither accurate nor fair. This is neither entirely fair nor correct.

Yes, alliance management can sometimes be infuriating, and no, even our closest friends have agency and *won't* always simply do everything we urge them to do. (They are sovereign states, after all, not captive vassals.) And it is true that our allies rather badly need to do more—much more!—in their own defense than they have hitherto done. Fundamentally, however, we still share powerful security interests with them that include *not* seeing Russian domination of Europe and Chinese domination of the Indo-Pacific. This makes *their* power a powerful potential complement to our own, and makes it imperative that we work together.

We do not live in an “America can handle it alone” world anymore, and despite the many frustrations they can and do cause us, our friends are, on the whole great *assets* to our geopolitical power—at least, that is, if we don't screw things up by blundering about destroying their longstanding trust in our leadership and even making them see us as a threat. But even *this* would still create a need for more capable U.S. theater nuclear forces, for as long as we care about deterring Chinese and Russian aggression at all, our eroding ability to work together well with our allies would force us to lean even *more* heavily upon nuclear tools.

These four factors all add up for a rather significant demand signal for more diverse and more numerous U.S. theater nuclear forces. To be sure, we surely do not need to meet our adversaries' capabilities on a one-for-one basis. Far from it, most likely, for the uses for which they have sized their theater arsenals are different from the reasons for which we

ourselves need such tools. *They* seek nuclear leverage with which to facilitate attacking their neighbors without American intervention, while *we* seek merely to make such invasions and nuclear coercive bargaining unfeasibly problematic. The kind of “damage limitation” needs that present themselves at the strategic level—that is, the need in a potential full-scale exchange to hit as many adversary nuclear assets as possible before they can be employed against us—do not so compellingly apply in theater, and I don’t think *we* need as many theater weapons as *they* think *they* do. That said, however, we now clearly *do* need more theater-class nuclear weapons than we have today, and we need a considerably broader *range* of such capabilities than we currently possess.

What We Need

So what do we need in response to this demand signal for theater forces? To put it bluntly, we need to put more “rungs” on our proverbial “escalation ladder”—that is, we need more capacity to answer adversary nuclear coercive bargaining and escalation manipulation (including limited nuclear use) with a flexible and diverse range of responsive options of our own. We need more diverse and flexible forces to avoid being caught in the deterrence-erosive dilemma of having to choose between theater-level nuclear impotence, on the one hand, and potentially world-ending strategic overreaction on the other: we seek to avoid putting a future U.S. president in the position of having to choose between “suicide and surrender.”

The Need for More Nuclear Options

Such flexibility need not rely exclusively on nuclear tools, of course, and new well-chosen conventional capabilities can surely help too. *Some* of the answer, however, lies in having more nuclear capacity. For this reason, it is good that the United States now seems to be genuinely interested in expanding its theater-class nuclear toolkit,¹ and that the U.S. Congress has even passed a law requiring the creation of a “rapid capabilities program” for purposes of “develop[ing] new nuclear weapons or modified nuclear weapons that meet military requirements.”²

Doing something useful is generally better than doing nothing, we should be open to a variety of possible answers to this need for more capability. My own favored approach is one I described in a recent *War on the Rocks* article,³ in which I urged the development of small nuclear warheads that could be optionally swapped into existing or planned long-

¹ Angus Roque & Aaron Mehta, “Pentagon wants ‘expanding options’ for nuclear weapon, officials say,” *Breaking Defense* (August 7, 2026), <https://breakingdefense.com/2026/08/pentagon-wants-expanding-options-for-nuclear-weapons-officials-say/>.

² 10 U.S. Code § 6137.

³ Christopher A. Ford, “A New Force Posture Concept for Europeanizing Extended Nuclear Deterrence,” *War on the Rocks* (June 29, 2026), <https://warontherocks.com/a-new-force-posture-concept-for-europeanizing-extended-nuclear-deterrence/>.

range conventional precision strike missile systems of the sort that are *already* being developed and deployed.

In that article, I explored this from the perspective of what *Europeans* might do if they conclude that they can no longer rely upon U.S. provision of “extended” nuclear deterrence. Nevertheless, the same dual-capability idea would work at least as well as an *American* undertaking, and I can think of no better way to provide more theater nuclear capability more quickly, and less expensively. If we needed it, moreover, such an approach might also form the basis of a “Nuclear Sharing 2.0” system in which we make U.S. nuclear warheads available for potential deployment on a broad range of hitherto conventional allied missile systems on terms much like those under which we prepare for the wartime possibility of letting NATO pilots deliver our B61 gravity bombs.

Tailored Deterrence vs. “Satisficing”

In terms of the weapons *themselves* we might thus want to build, I suppose one would ideally seek to “tailor” our posture to the particular needs of deterrence, escalation management, and (potential) warfighting against the specific adversaries we face. This might mean, for example, assessing what your adversary most wants to protect and then building tools designed to hold those things reliably at risk—thus facilitating a strategy of “deterrence by punishment” to intimidate him into avoiding aggression. Alternatively or additionally, one could identify targets the destruction of which would simply physically *preclude* the adversary from accomplishing his objectives in a theater conflict, thereafter building tools optimized for hitting *them*—thereby facilitating a strategy of “deterrence by punishment,” as well as acquiring capabilities that would be of benefit in actual warfighting should deterrence fail.

In practice, however—as I outlined in another recent article in *Defense & Strategic Studies Online*⁴—it may be difficult to do such “tailoring” with great precision or reliability, with the result that it might not be wise for us to put all of our deterrence eggs, if you will, in the basket of high-fidelity “tailoring.” The adversary’s thinking might be too unclear to us to permit good tailoring, for instance, or we might simply misunderstand him. Or the needs of tailoring vis-à-vis Russia and its requirements vis-à-vis China might point in different directions, making it hard to accomplish both sets of goals optimally with a single force posture. Or the criteria for what would constitute good tailoring might change over time, particularly whenever new leaders take over in Moscow and Beijing. You can see the conceptual problem.

For this reason—and in an approach I have tried to make memorable by terming it Bargaining and Deterrent Arsenal Super-Sufficiency (or “BaDASS”)—it seems wiser to acquire nuclear tools flexible and numerous enough to permit the accomplishment of as great a range of different missions as possible, to some extent even beyond what we may

⁴ Christopher A. Ford, “Conceptual Challenges of ‘Tailoring’ Nuclear Deterrence,” *Defense & Strategic Studies Online*, vol. 2, no. 4 (Summer 2026), p. 1, https://dss.missouristate.edu/_Files/MSU-DASSO-2026-Vol_2-No_4-Ford.pdf.

think we currently need. If there is a “tailoring” metaphor here, it may thus be in abandoning the idea of a nice bespoke suit in favor of something more loose-fitting and durable: more Carhartt workwear, if you will, than Saville Row finery. Such a *non-tailored* answer might not be elegant or attractive, but it would likely be adequate as clothing in a much greater range of unforeseen and potentially trying circumstances.

Reversing some of the implied logic of nuclear “tailoring,” this would *not* be working from an identified need to a specific use concept, and thence to the deployment of a particular capability fine-tuned to meet that need. Rather, it would develop a maximally flexible capability, and then find ways to make some of the various things it is capable of doing support a strategy that is as coherent as possible in light of the challenges we face any given time. The basic idea of tailoring is not wrong, in other words, but we need to do it more at the level of strategy, declaratory policy, and behavior than at the level of actual capabilities.

To my eye, as applied to the challenge of theater weaponry, I’d think we need systems with variable explosive yield, high accuracy, stealthy or otherwise interception-resistant standoff delivery, a weight and size small enough to allow deployment on a broad range of delivery systems, and perhaps even an enhanced neutron flux (a.k.a. “neutron bomb”-type) option in case one wants to maximize crew-killing impact against advancing Russian units or Chinese ships trying to fight their way across the Taiwan Strait. To be sure, of course, this is an idealized list of characteristics, and in keeping with my more general theme of what Herbert Simon called “satisficing,” we may have to make trade-offs when balancing against the *also*-important values of cost, speed, and scale of production. But we do need to be thinking about concrete capabilities with an eye to the feasible maximization of our range of available responses in crisis or conflict.

With an eye to thus doing our “tailoring” primarily at the *policy* level, moreover, I’d also like to see us do more on the *conceptual* side of integrating theater and strategic effects to counter theater-class nuclear coercive bargaining or escalation games by our adversaries. This might mean, for instance, more work on cross-domain operational concepts, more serious nuclear-related coordination planning with more allies—including with the hitherto conceptually rigid and too often generally unhelpful French—and more wargaming and scenario-explorations that run notably “right of ‘Boom’” into limited-nuclear-use territory. This is also an area where the unclassified, outside-of-government world of think tanks and academia can play a role in helping increase the West’s collective “deterrence IQ.”

Addressing the Challenges

So what are the main challenges of making such a vision come true? Put simply, they relate to money, time, technical design, and politics.

Expense

The first challenge is simply cost. While there are surely less expensive and more expensive approaches one could take, the development of *any* new theater nuclear capabilities, even if

prudently chosen, will have real expense. And we should not pretend that actually paying such a cost will be easily done at a time in which federal spending seems to be more out of control than ever.

Our national debt, for instance, has doubled under Presidents Biden and Trump to an appalling \$40 trillion, creating an absolute monument to fiscal irresponsibility and a whole coop of ugly chickens, as it were, that will surely come home to roost before too long. This horrifying debt burden *isn't* primarily due to defense spending, of course—not by a long shot—for the federal government today spends more on the federal handouts of Social Security, more on Medicare, and more merely in paying *interest* on the exploding national debt than it does in defending the American people. Nevertheless, thanks to long decades of federal fiscal foolishness, making the case for spending more money on just about *anything* may become harder and harder in the years ahead.

The Need for Speed

Another constraint is *time*. We were, I fear, quite stupid years ago to hard-wire our nuclear weapons production infrastructure in place at a post-Cold War low that would quite predictably make it staggeringly difficult to build more weapons or develop new ones at any meaningful scale if the international security environment worsened, as it is now doing. This is, in principle, a fixable problem if we're willing to invest the money—and I'm pleased that we started to do so in the First Trump Administration—but it isn't fixable quickly.

In the short term, our ability to respond to new strategic challenges with more or new nuclear tools thus lies only in the "hedge" we have maintained in the form of mothballed weapons that could be taken out of storage and uploaded onto those U.S. strategic delivery systems with spare capacity. That's not nothing—and indeed a forthright call for such uploading appeared in the unanimous and bipartisan conclusions of last year's U.S. Institute of Peace report on strategic stability.⁵ Nevertheless, uploading is only a "Band-Aid" sort of a fix as long as our strategic adversaries remain convinced that they can ultimately win an ongoing arms race against us because we are unable actually to build anything more or anything new at any meaningful rate.

This means that as we move forward to try to address the problem of theater overmatch, we should place a premium upon designs that are capable of being produced not just relatively cheaply but also *rapidly*. If this entails foregoing "exquisite" weapon capabilities in favor of ones that are simply *good enough*—buying Hondas over Ferraris, if you will—so be it.

⁵ U.S. Institute of Peace Senior Study Group on Strategic Stability, *Final Report – Sustaining the Nuclear Peace: On the Urgent Need for a New Strategy of Strategic Stability* (USIP: February 2025), p. 9, <https://irp.cdn-website.com/ce29b4c3/files/uploaded/USIP+Senior+Study+Group+on+Strategic+Stability+Final+Report.pdf>.

Finding the Right Design(s)

Working merely from open sources, it is not clear exactly what actual weapons remain sitting in the long queue of retired U.S. devices awaiting dismantlement. Which of these weapons might most easily, quickly, and usefully be dusted off, tuned up, and repurposed for the kinds of roles we're talking about here? Or what designs derived from the long legacy of our weapons program might be suitable for resurrection? This question requires technical input beyond what I can provide, especially here.

In Praise of Dual-Capable Systems

For my part, however, I'm intrigued by some of the smaller devices the United States used to have—nuclear weapons which would surely fit into all sorts of modern conventional delivery systems with room and weight to spare, thus both leaving space for the clever interface gear that would be needed for nuclear “plug-and-play” optionality, and perhaps also making possible extended missile range. During the Cold War, the United States built and deployed a whole range of smaller nuclear weapons, even in the form of munitions for eight-inch (203-millimeter) and even six-inch (155-millimeter) artillery such as the W79 and the W82 with very low yields of between 100 tons to two kilotons and the option of an Enhanced Radiation Weapon (ERW) neutron flux capability of the sort I described earlier. (Nor did those particular devices depend on the same sort of plutonium “pit” that we are struggling to learn how to produce again: it has been reported that the old artillery shells relied on “linear implosion” rather than our now-current spherical pits. Perhaps such a simpler mechanism could be more “producible” at tolerable speed and scale?) As for reliability, we explosively tested a whole raft of old designs decades ago, so further testing of a “resurrected” design might not be needed.

Regardless of which smaller, variable-yield system we pursued, a modular nuclear warhead freely “swappable” in or out of precision-strike systems would provide much greater operational and long-term flexibility than the nuclear systems—the Submarine-launched Cruise Missile-Nuclear (SLCM-N) and the W76-2 lower-yield warhead for the Trident Submarine-Launched Ballistic Missile (SLBM)—the United States is known to be developing or fielding to meet theater needs. This is true for at least four reasons.

- First, because it would be “delivery system agnostic,” a modular dual-capable approach would offer us greater ability to meet *future* deterrence or warfighting needs that differ from what we presently anticipate we will face. Having variable nuclear yield and effects with a warhead that could be swapped into different delivery systems would keep us from being stuck with a delivery system that might turn out to be *not* precisely what we need for deterrence at some future point, but with which we'd nonetheless be stuck because such “bespoke” nuclear-only delivery systems take forever (and cost a king's ransom) to replace. The “radical optionality” of such a modular system would be thus a terrific way to “hedge” against future

changes in the security environment affecting operational requirements for theater nuclear delivery.

- Second, a system based around such dual-capable optionality could reduce the burdens upon scarce U.S. submarine assets—*e.g.*, the attack submarines that would be needed to deliver SLCM-N—that would also have value in a high-end conventional fight. If we could swap nuclear warheads into a range of *other* delivery systems in ways that met our needs, we’d have less need to devote precious torpedo tubes or Vertical-Launch System (VLS) capacity on our submarines to SLCM-N. (Small, modular warheads might, for instance, be carried aboard submarines as separate units without encumbering magazine capacity for conventional munitions, only being “swapped in” at the last minute if needed.) This would, again, serve the purpose of overall flexibility and optionality over time.
- Third, having “swappable” warheads would also increase U.S. leaders’ choices by giving them the option of generating additional nuclear force capacity in the field in ways that were either visible to or *not* visible to the adversary. This would allow strategic signaling options—or, alternatively, quasi-covert force generation—not feasible merely with SLCM-N and the W76-2.
- Fourth, being able to swap small nuclear warheads into new strike systems such as hypersonic missiles would permit faster response times against fleeting or otherwise high-priority adversary targets than the old Tomahawk platform used for SLCM-N, which travels at significantly less than the speed of sound—an operational deficiency likely to be particularly problematic over the vast distances of the Western Pacific. (The W76-2 can be delivered quickly since it rides on the submarine-launched Trident missile, but it has the drawback of requiring that a visibly *strategic* asset be used for delivering *theater* effects, with potentially escalatory implications.) Being able to deploy warheads on faster-moving theater systems would presumably also provide advantages in penetrating modern air defenses.

“Entanglement” Risks are Overrated

Nor would such U.S. dual-capable systems entail the kind of destabilizing “entanglement” problems that some scholars have claimed. To begin with, it is only arguable that “entanglement” is destabilizing at all, since nobody seems to fear that the ongoing rain of Russian conventionally armed but dual-capable missiles on Ukraine actually signals the start of a nuclear war. At most, the risk of mistaking an incoming conventionally armed dual-capable missile for a nuclear attack is merely *contextual*, not axiomatic.

But even if you feel that it would be better if *nobody* had dual-capable systems, that’s not the world in which we live. In *this* world, our adversaries have fielded lots of them for a long

time—and that’s not even counting multiple generations of fighter-bombers on both sides that can carry nuclear weapons if they need to. If “entanglement” is a problem at all, therefore, it’s a *worse* problem if only *one side* had dual-capable systems. In that case of asymmetric entanglement,

our adversaries might expect *us* to be at least somewhat ‘self-deterred’ by fears of attacking *their* dual-capable systems, while *they* would feel much freer to attack as many of our own (currently non-dual-capable) systems as they can.⁶

Deploying our own dual-capable systems would likely reduce the degree of destabilization by ensuring at least that its impact is not asymmetric in ways that favor Russia or China.

But I don’t want to get bogged down in such hardware questions here. I am not a technical expert, and such mere speculations from *outside* the weapons infrastructure may, from the perspective of a real weapons designer, be more embarrassing than enlightening. Nevertheless, whether or not these specific musings make any sense, I think my broader point is sound: if we are willing to be creative, there may be a great deal of *past* learning upon which we can very helpfully draw to help answer the contemporary theater-overmatch problem—if not precisely cheaply and quickly, then at least *comparatively* so.

Programmatic Sustainability

If good plans for new theater-class systems can indeed be devised and implemented, we would then face one additional major challenge: that of sustainability. Our problem of theater nuclear overmatch developed slowly, as a result of relentless Chinese and Russian building programs, as well as the Kremlin’s willingness to engage in arms control cheating by not fulfilling its “Presidential Nuclear Initiatives” promises from the early 1990s and not complying with the Intermediate-range Nuclear Forces treaty. Any “fix” to this problem will also take some time to be implemented. Even thereafter, moreover—absent significant arms control progress that *might* occur but of which we cannot be assured—we would still be faced with the challenge of sustaining that solution over some considerable period of time.

Ultimately, this raises the question of the *politics* of deterrence—that is, of whether we can sustain support for a robust deterrent posture over time. I remain confident that the American people *are* capable of that kind of enduring seriousness, both about national defense in general and about nuclear deterrence in particular.

To ensure such sustainability, however, U.S. leaders at all levels—from the most modest operational officer, think tank scholar, or academic all the way up to the president himself—will need to do a lot more to recover the ability to speak persuasively about nuclear matters, basing both their strategies and their associated public messaging on clear concepts and compelling logics. With the U.S. national security community having spent a generation or a *de facto* “strategic holiday,” it will not be quick or easy. But it is essential.

⁶ Ford, “A New Force Posture Concept for Europeanizing Extended Nuclear Deterrence.”

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ANALYSIS

RUSSIA'S NUCLEAR BEHAVIOR IN A TIME OF WAR

Stephen Blank

Russia has been at war with Europe for a generation. While this war has been largely non-kinetic, every NATO intelligence organization expects a Russian-launched conventional war backed by threats of nuclear escalation by 2029.¹ Russian military threats against Japan and South Korea are also mounting. Russia conducts ever more drone probes, missile strikes, underwater cable cutting, arson, assassinations, criminal activities, cyberstrikes, information and influence operations, and other attacks against civilian and military targets that are apparently becoming more professional as they multiply.²

Russian threats transcend Europe. The Sino-Russian entente, expressed in exercises and overflights around, in, and over Japanese, South Korean, and Arctic air space, along with Russian land, sea, and air deployments—including conventional and nuclear missiles—have alarmed Japanese and South Korean policymakers, leading them to solidify defense ties with Washington and revamp defense policy.³ Russia's formal alliance with North Korea enhances these threats as do Russian threats to Seoul to deter its support of Ukraine. Indeed, credible leaked reports from the FSB (Russian intelligence) show that Russia seriously contemplated attacking Japan and South Korea in 2021.⁴

Thus, Russia is a state whose *raison d'être* is preparation for war. This war could be kinetic as in Ukraine or non-kinetic as European operations show. These non-kinetic operations represent persistent, organized, multi-dimensional campaigns to exercise constant long-term pressure upon targeted states either to achieve permanent leverage or overturn them. Their continuing growth signifies both a deterrence failure and ongoing escalation and show Moscow's increased confidence about escalating without incurring serious risk.⁵ Russia's theory of victory integrates covert activities with preparations for

¹ Murray Brewster, "The 2029 Warning: NATO's Race to Rearm Ahead of Russia," *CBC*, June 12, 2026, <https://www.cbc.ca/news/politics/russia-nato-arms-germany-war-canada-9.7232514>.

² Claudia Ciobanu, "Poland Warns Russia Is Moving From Low-Cost Recruits To Professional Sabotage Cells," *The Washington Post*, May 6, 2026, https://www.washingtonpost.com/world/2026/05/06/poland-russia-belarus-sabotage-espionage-hybrid-war/31e94fe4-4938-11f1-a119-857cd2bf4fd4_story.html; and, Emma Burrows and John Leicester, "Russia Is Ramping Up Its Attempts To Kill Its Opponents In Europe, Intelligence Officials Say," *Associated Press*, May 7, 2026, [https://apnews.com/article/russia-putin-killing-assassination-intelligence-6e60452ecbe1a42a0ddc9adcd2f39f23.officials say](https://apnews.com/article/russia-putin-killing-assassination-intelligence-6e60452ecbe1a42a0ddc9adcd2f39f23.officials%20say)

³ Daniil Zhukov, "A Tangled Ball: Russian Nuclear Policy, Relations and Risks in Northeast Asia," *Journal for Peace and Nuclear Disarmament*, Vol. 8, No. 1 (2025), pp. 91–111, <https://www.tandfonline.com/doi/epdf/10.1080/25751654.2025.2507510?needAccess=true>.

⁴ Ryder Blackthorne, "Russia Considered Attacking Japan Before Invading Ukraine – How Would That Have Turned Out?," *Medium*, April 20, 2025, <https://medium.com/@jayduggy87/russia-considered-attacking-japan-before-invading-ukraine-how-would-that-have-turned-out-2b0dde4c1b39>.

⁵ Alexander Mattelaer, "Making Russia Fear Escalation Again," *Hague Center For Strategic Studies*, 2026, <https://hcss.nl/wp-content/uploads/2026/03/Making-Russia-Fear-Escalation-Again-HCSS-2026.pdf>.



both conventional and nuclear conflict. Since Russia apparently believes it can dominate and control limited nuclear exchanges, the risk of conventional conflict does not faze it. Therefore, Russia acts freely below the threshold of armed conflict.⁶

Much research confirms this integration of “gray zone operations” with conventional and nuclear forces. These operations are inherently escalatory to the nuclear level, especially as there are good reasons for believing that Russia has a first-strike doctrine. Therefore, this article investigates Russia’s objectives, doctrine, strategy for integrating conventional and nuclear conflict, procurements, and exercises.

Russian Threat Assessment

Many signs point to a Russian nuclear first-strike doctrine and strategy that would respond to a conventional Western attack and also strike first, whether preemptively or not, including the many examples of nuclear threats and signaling before and since Russia invaded Ukraine.⁷ Russia’s continuing wartime mobilization that comprises a large-scale conventional buildup and nuclear weapon modernization also suggests a first-strike posture, most likely for an intended (or so Moscow believes) limited strike.⁸

Justifying this posture is a deeply rooted, pervasive assessment of growing Western threats to Russia that melds intelligence organs’ official paranoia with the latest iteration of classic Russian imperialism, including theological support for nuclear threats, if not warfare and imperialism.⁹ Putin frequently depicts the aggression against Ukraine as an existential war that NATO forced upon Russia.¹⁰

This unending paranoia drives much of Russia’s overall security and military policies, not just nuclear use.¹¹ It stems from the obsession with great power status, compelling domestic and foreign audiences to acknowledge that status, and Russia’s accompanying ability to act

⁶ Ibid., p. 1.

⁷ Aylin Matlé, András Rácz, “Russia’s Nuclear Signaling in 2026 and Implications for European Security,” *DGAP Memo*, German Council on Foreign Relations, June 2026, <https://dgap.org/en/research/publications/russias-nuclear-signaling-2026-and-implications-european-security>.

⁸ Elbridge Colby, “Russia’s Evolving Nuclear Doctrine and Its implications,” Foundation for Strategic Research, 2016, <https://www.frstrategie.org/en/publications/notes/russias-evolving-nuclear-doctrine-implications-2016>; and, Hans M. Kristensen, Matt Korda, Eliana Johns and Mackenzie Knight-Boyle, “Russian Nuclear Weapons, 2026,” *Bulletin of the Atomic Scientists*, Vol. 82, No. 3 (2026), pp. 221-254, <https://www.tandfonline.com/doi/epdf/10.1080/00963402.2026.2659527?needAccess=true>.

⁹ Dmitry Adamsky, *Russian Nuclear Orthodoxy: Religion, Politics, and Strategy* (Stanford, CA and London: Stanford University Press, 2019); and, Dmitri Minic, “Russia’s Nuclear Deterrence Put to the Test by the War in Ukraine,” French Institute of International Relations, October 6, 2025, <https://www.ifri.org/en/studies/russias-nuclear-deterrence-put-test-war-ukraine>.

¹⁰ Steven Pifer, “Russia Ukraine and Existential War,” Stanford University Center for International Security and Cooperation, March 6, 2023, <https://cisac.fsi.stanford.edu/news/russia-ukraine-and-existential-war>.

¹¹ Minic, op. cit.

with impunity domestically and globally.¹² Alexei Arbatov long ago correlated internal and foreign policy through this pervasive imperial obsession, noting, “[t]his interdependence between the regime’s nature at home and its projection abroad explains why those trying now to rehabilitate Stalinism and appeal for a return to this or that form of authoritarian regime always link it to a revival of some form of Russian (or Soviet) empire and permanent confrontation with the West.”¹³

This imperial mystique pervades the Russian elite. As one official told journalist Edward Lucas in 2000, the aim is, “Nothing happens that we don’t know about, and nothing happens that we don’t like—apart from that, it is up to them.”¹⁴ Or, as Foreign Minister Sergei Lavrov said, quoting Catherine the Great’s advisors, “Not a cannon can be fired in Europe without our consent.”¹⁵

Nuclear weapons are the foundation for this claim to great power status. Russia’s official handbook for future diplomats, *Diplomaticheskaya Sluzhba*, states that, “Russia’s great power status is determined by its geostrategic position, nuclear potential, and status on the UNSC [United Nations Security Council] rather than by metrics such as economics—Moscow’s diplomacy must ensure the country’s position as an authoritative and influential member of the international community.”¹⁶ Since Russia’s great power identity and nuclear arsenal are inextricably tied to each other, any threat to the former triggers an invocation of the latter. Because Russia’s leadership and elite believe that NATO’s alleged non-kinetic influence operations supported by American conventional superiority permanently threaten it, Russia always deters the West by nuclear means. Consequently, there can only be détente if Washington and NATO remain shackled to the Cold War mutual hostage relationship based on mutual deterrence so that it cannot act unilaterally. Only then does Moscow gain a measure of restraint or even control over U.S. policy. Patrick Morgan explains that this kind of classic deterrence “cuts through the complexities of needing to have a full understanding of or dialogue with the other side.” Instead, it enables Russia, to “simplify by dictating, the opponent’s preferences.”¹⁷

Equally importantly, Russia’s non-kinetic operations are inconceivable without Russia’s nuclear shield and constant threats of escalation. Major Amos C. Fox (USA) wrote that

¹² Bobo Lo, “Between Aspiration and Reality: Russia’s Place in the World (Dis) Order,” *Russie.Eurasie.Visions*, No. 134, French Institute of International Relations, June 2024, https://www.ifri.org/sites/default/files/migrated_files/documents/atoms/files/ifri_lo_russia_world_disorder_2024.pdf.

¹³ A. Arbatov, “Russia’s Own Imperial Road,” N. Bubnova, Ed., *20 Years Without the Berlin Wall: A Breakthrough to Freedom* (Moscow: Carnegie Center, Carnegie Endowment for International Peace, 2011).

¹⁴ Edward Lucas, “The Coming Storm: Baltic Sea Security Report,” Center for European Policy Analysis, June, 2015, <https://cepa.org/wp-content/uploads/2023/05/The-Coming-Storm.pdf>.

¹⁵ Sergey Lavrov, “Russia’s Foreign Policy: Historical Background,” *Russia in Global Affairs*, March 3, 2016, http://www.mid.ru/en/foreign_policy/news/-/asset_publisher/cKNonkJE02Bw/content/id/2124391.

¹⁶ Nicole Grajewski, “Russia and the Global Nuclear Order,” Center for Naval Analyses, March 2024, <https://www.cna.org/reports/2024/03/Russia-and-the-Global-Nuclear-Order.pdf>.

¹⁷ Stephen J. Blank, “Russia and Nuclear Weapons,” in Stephen J. Blank, Ed., *Russian Nuclear Weapons: Past, Present, and Future* (Carlisle Barracks, PA: Strategic Studies Institute, U.S. Army War College Press, 2011), pp. 308-309.

Russian nuclear weapons and integrated air defense system facilitate deterrence of NATO expansion into Russia's historic sphere of influence; help restrain regional hegemony in Eurasia; and, demonstrate improvements to Russian military capabilities.¹⁸ Moreover, nuclear weapons represent the first critical component for hybrid warfare because they deter a massive ground response to an incremental limited war.¹⁹

Michael Petersen likewise observes that Russia's military strategy of strategic deterrence focuses on imposing costs on an adversary to manage escalation throughout all phases of a crisis, to undermine the adversary's will, and to resolve the conflict on terms favorable to Moscow.²⁰ Petersen also notes that, given the General Staff's orientation toward preemptive, or what Chief of the General Staff, General Vitaly Gerasimov calls preventive strikes, one cannot assume that Russia will confine itself in the initial period of war to purely tactical defensive strikes.

Instead, Russian forces (especially the navy) may launch offensive strikes against enemy civilian and military infrastructure to raise costs and impose deterrence upon the adversary so he will either not respond forcefully or escalate. This point accords with Russia's 2017 *Maritime Doctrine*.²¹ These strikes may be either conventional or nuclear, which, in the case of tactical nuclear weapons (TNWs) would be first-strike nuclear strikes to regulate the "intensity and scope of the conflict."²² Thus, there is an integral interplay between conventional and nuclear domains for Russia's concept of strategic deterrence.²³ There is also the risk of preemptive nuclear strikes, probably with TNWs or Russia's many theater-range strike systems.

Two conclusions arise from this situation. First, Russia's threat perception and militarization represent a permanent military-political challenge that is only solved by a systematic political-military deterrence strategy that counters Russia's escalatory theory of victory. Hence, arms control can only flourish after a prior decisive shift in Russo-Chinese-American political perceptions. The problem is political and strategic, not technological as too many analysts believe.²⁴ Second, given Russia's first-strike doctrine, deterrence must be restored throughout the entire spectrum of conflict.²⁵

¹⁸ Ibid., pp. 18-19.

¹⁹ Ibid., p. 56.

²⁰ Michael B. Petersen, "Toward an Understanding of Maritime Conflict with Russia," *The Sea In Russian Strategy*, Andrew Monaghan, and Richard Connolly, (eds.), (Manchester: Manchester University Press, 2023), pp. 207-209.

²¹ Ibid., pp. 207-209, 221-223.

²² Kristina Melin, "Russia's Updated Basic Principles for Nuclear Deterrence A Broom for All Corners?," *Russia and Eurasia Studies Program, Nuclear Weapons Analysis*, Swedish Defence Research Agency, March 2025, p. 3, <https://www.foi.se/rest-api/report/FOI%20Memo%208829>.

²³ Ibid.

²⁴ Francis J. Gavin, "Understanding Schelling's Nuclear Paradigms with Francis J. Gavin," *Texas National Security Review*, Spring 2026, <https://tnsr.org/2026/04/understanding-schellings-nuclear-paradigms-with-francis-j-gavin/>.

²⁵ Mattelaer, *passim*.

Russia's War On the West

The evidence for Russia's continuing generation-long war is overwhelming. Russia's war with Europe began with the failure to subvert Ukraine's 2004 elections.²⁶ Since then Russia has believed itself to be at war with Europe. Therefore, Russia is undergoing an ongoing militarization of the state and preparation for war.²⁷ And, because its pivot to Asia failed, it increasingly aligns with China and poses a standing threat to Japan, which it regards as a platform for U.S and Japanese missile strikes against Russian Asia.²⁸

Moreover, one cannot clearly demarcate between "hybrid" and kinetic operations. The nuclear weapons revival and the threat assessment of nefarious Western intentions started in 2004, if not earlier.²⁹ Defense correspondent Pavel Felgenhauer reported in 2005 that the General Staff, including military intelligence (the GRU), controls information flows to Putin and historically has distorted information to provide deliberate worst-case analyses.³⁰ Likewise, Putin told the G-8 press corps in 2007 that Russia and the West were returning to the Cold War and added his readiness to threaten Europe with ballistic or cruise missiles.³¹ Recently Dmitri Peskov, Putin's Press Secretary, warned Europe that if it allows drone flights over its territories to attack Russian targets, Russia reserves the right to attack its drone factories.³² Indeed, Moscow published European addresses, overtly warning Europe of potential threats to it and indicating previous and ongoing reconnaissance of its targets.³³

Doctrine

Russia may employ nuclear weapons against purely conventional threats, not just nuclear ones. Doctrinal writings clearly make this point and actual behavior manifested in

²⁶ William Dixon and Maksym Beznosiuk, "Russia Will Never Agree to Peace in Ukraine," *The National Interest*, April 26, 2026, <https://nationalinterest.org/feature/russia-will-never-agree-to-peace-in-ukraine>.

²⁷ Andrew Monaghan, *Blitzkrieg and the Russian Art of War* (Manchester, UK: Manchester University Press, 2025); and, Stephen Blank, "The Russian Total War Tradition," *Statecraft & Strategy*, June 26, 2026, <https://www.statecraftandstrategy.com/the-challenge-of-putins-russia/the-russian-total-war-tradition/>.

²⁸ Lyle J. Goldstein and Vitaly A. Kozyrev, *The New Cold War at Sea: Maritime Implications of the New China-Russia Quasi Alliance* (Annapolis, MD: Naval Institute Press, 2026).

²⁹ "Direct Line with Vladimir Putin," Channel One, Rossiya 1, Rossiya 24 and Public Television of Russia TV channels, and Mayak, Vesti FM and Radio Rossii Radio Stations, June 7, 2018, www.kremlin.ru.

³⁰ Pavel Felgenhauer, "Russia's Imperial General Staff," *Perspective*, October-November 2005, Vol. 16, No. 1, <https://open.bu.edu/server/api/core/bitstreams/a3b20aa8-b718-4c2a-9250-9f0753952980/content>.

³¹ "Putin Interviewed by Journalists from G8 countries – text," June 4, 2007, www.kremlin.ru. (Retrieved from Nexis-Lexis).

³² "Peskov Otsenil Veroyatnost Atak Rossii Na Ob'ekty Proizvodstvu dronov v Evropy," *Kommersant*, April 17, 2026, <https://www.kommersant.ru/doc/8603685>.

³³ Alexei Doval, "Potential Targets: Moscow Releases Data About European Firms Making Drones for Ukraine," *Euronews*, April 16, 2026, <https://www.euronews.com/my-europe/2026/04/16/potential-targets-moscow-releases-data-about-european-firms-making-drones-for-ukraine>.

procurements, exercises, and threats like Peskov's, confirm it.³⁴ American nuclear policies and conventional superiority also generate a constant quest for nuclear weapons.

An extensive and insightful literature exists concerning Russian nuclear doctrine and strategy. But assessments of Russian nuclear behavior, i.e., what Moscow actually does, are much sparser. Russian nuclear behavior since 2022 may be divided into four categories: rhetoric, including official and semi-official threats, and doctrine; war plans (where available in verified but unclassified versions); procurement, i.e., testing and new weapons systems deployed since 2022; and, exercises.

Russia's overall strategy is strategic deterrence.³⁵ *Strategicheskoye Sderzhivanie* (strategic deterrence) explicitly requires Russia to utilize every instrument of power it has to deter a nuclear or conventional attack, expressly advocating multi-domain coercion. Strategic deterrence differs from the U.S. concept of deterrence. Russians characterize U.S. deterrence programs as intimidating even though Putin's Russia is a classic intimidation culture, like the Mafia.³⁶ Russia's concept of deterrence also comports very well with fundamental tendencies in Russian strategic culture, and subsumes the widely used, even prevailing (although incorrectly applied) term for Russian strategy, hybrid warfare.³⁷

Thus, Moscow utilizes (or intends to use) all these instruments in multiple domains simultaneously and continuously, assuming a permanent condition of near war, if not actual war. The concept aims explicitly at compelling or coercing the enemy to act within a framework that Moscow controls, thereby linking this term to Russia's concept of reflexive control: inducing enemies to make decisions benefitting Russia even though they think they are advancing their own interests.

Second, strategic deterrence aims at imposing Moscow's control throughout all forms of deterrence, encompassing prewar, wartime and even postwar periods. This concept validates Harry Summers' observation that, "[a]t least from the military perspective, it is well understood that conflict prevention depends on a credible capability for conflict control."³⁸ Likewise, the Turkish scholar Bans Caglar argues that strategic deterrence presumes permanent warfare so that Russia can constantly apply military and non-military measures as needed to achieve escalation control on the battlefield by the effective threat of nuclear

³⁴ "Peskov Otseuil Veroyatnost Atak Rossii Na Ob'ekty Proizvodstvu dronov v Evropy," op. cit.

³⁵ Stephen Blank, "Clausewitz's Russian Chameleon: Russia's 'Nameless' War," Olga Bertlesen, Ed., *Russian Influence Operations: Disinformation and Beyond* (New York, NY: Columbia University Press for Ibidem Verlag, 2026); and Stephen Blank, "Nuclear Weapons in Russia's War against Ukraine," *Naval War College Review*, Vol. 75, No. 4 (Autumn, 2022), pp. 53-78, <https://digital-commons.usnwc.edu/nwc-review/vol75/iss4/6>.

³⁶ Irenusz Pawel Karolewski and Viktoriya Kaina, "Is Russia Now a Criminocracy?," London School of Economics (LSE) Blogs, October 23, 2023, <https://blogs.lse.ac.uk/europpblog/2023/10/23/is-russia-now-a-criminocracy/>.

³⁷ Kristin Ven Bruusgaard, "Russian Strategic Deterrence," *Survival*, Vol. 58, No. 4, 2016, pp. 7-26.

³⁸ Harry G. Summers (Col., USA, Ret.), "War: Deter, Fight, Terminate; the Purpose of War Is a Better Peace," *Naval War College Review*, Vol. 39, No. 1, Winter 1986, p. 20.

war.³⁹ This is not what Western observers called an “escalate to de-escalate” strategy, although that concept is not incompatible with a broader strategy of escalation control. Lastly, strategic deterrence effaces the demarcations between offense and defense and between deterrence and coercion.⁴⁰

Dmitry Adamsky similarly concluded that Russia’s concept of deterrence follows the Leninist and Soviet practice of erasing distinctions between offense and defense and between compellence (and coercion) and deterrence.⁴¹ Moscow’s global non-kinetic war fully integrates nuclear and non-nuclear instruments of force in a strategy designed to allow it to target the United States and its allies even in a regional war with NATO. Russia sees regional war as an opportunity to prevail by constantly brandishing the nuclear threat. Indeed, it has no other choice. Russia’s technological and thus conventional warfare inferiority vis-à-vis the West obliges it to raise nuclear threats to ensure the success of its conventional operations.⁴²

Doctrine and First Strike

In 2018, Putin described Russian nuclear policy as launch on warning of an approaching missile.⁴³ While this may include conventional NATO launches, it apparently does not include Ukrainian conventional strikes. But Putin’s remarks still leave space for a Russian nuclear first strike. Subsequently the military doctrine explicitly added missile attacks from Ukraine, if allied to NATO, against Russia and Belarus. Yet that has not happened despite continuing nuclear threats. Furthermore the 2024 *Fundamentals of Nuclear Deterrence* acknowledged that Russia conducts nuclear deterrence against purely conventionally armed states, warned that other countries’ missile defenses threaten Russia, and cited various conventional weapons that can be directed against Russia, along with concerns over NATO enlargement and Ukraine.⁴⁴

Conditions leading to nuclear use include receipt of credible warning, as noted in 2018, and, “aggression against the Russian Federation and (or) the Republic of Belarus as participants in the Union State with the employment of conventional weapons, which creates a critical threat to their sovereignty and (or) territorial integrity.” Thus, Moscow extended deterrence to Belarus after deploying nuclear weapons there in 2022, undermining the

³⁹ Bans Caglar, “The Spectre of Nuclear Weapons Use in Ukraine: The Nuances of Nuclear War Risk,” https://www.researchgate.net/publication/380146741_THE_SPECTER_OF_NUCLEAR_WEAPONS_USE_IN_UKRAINE_THE_NUANCES_OF_NUCLEAR_WAR_RISK#fullTextFileContent.

⁴⁰ Ven Bruusgaard, op. cit.

⁴¹ Dmitry Adamsky, “The Two Marshals: Nikolai Ogarkov, Andrew Marshall and the Revolution In Military Affairs,” in Hal W. Brands, Ed., *The New Makers of Modern Strategy: From the Ancient World To the Digital Age* (Princeton, N.J.: Princeton University Press, 2025), p. 915.

⁴² Caglar, op. cit.

⁴³ “Presidential Address to the Federal Assembly,” March 1, 2018, <http://en.kremlin.ru/events/president/news/56957>.

⁴⁴ “Fundamentals of State Policy of the Russian Federation on Nuclear Deterrence,” December 3, 2024, https://www.mid.ru/en/foreignpolicy/international_safety/1434131/.

spirit, if not the letter, of the Non-Proliferation Treaty. These doctrinal statements and deployments also reduced restrictions on a nuclear first strike. Those weapons, the Oreshnik (Hazelnut) IRBM, are dual-use missiles whose training and deployment reveal their offensive nature despite Russian rhetoric.⁴⁵

Recent writing on the formal modelling of potential nuclear war also warns that a country like Russia, that believes its conventional arsenal to be insufficient against NATO, might strike first. Russia might threaten Western militaries with limited nuclear strikes since its conventional deterrent is insufficient.⁴⁶ Therefore, if Russia faces an apparent defeat in Ukraine, it might regard that as an existential threat justifying an asymmetric escalation to a limited nuclear first strike.⁴⁷ Or, if the current war escalated to include NATO missile strikes, especially against critical Russian targets, there could be a Russian nuclear first strike.

Other doctrinal documents also indicate first-strike options. Russia's navy may launch offensive conventional or nuclear strikes against civilian and military infrastructure to raise costs and impose deterrence, by threatening to escalate as stated in Russia's 2017 *Maritime Doctrine*.⁴⁸ These may be nuclear first strikes to regulate the "intensity and scope of the conflict."⁴⁹ Here again there is interaction between conventional and nuclear domains for Russia's concept of strategic deterrence.⁵⁰

Earlier doctrinal statements led many Western observers to maintain that Russia would either threaten escalation to the nuclear level or actually detonate such a weapon to deter Western forces' response to a Russian conventional attack.⁵¹ Russia's 2017 *Maritime Doctrine* explicitly invoked naval use of nuclear weapons as a legitimate deterrent.⁵² It stated that the Navy,

Possess[es] strategic nuclear and conventional naval forces and the ability to implement its combat potential in virtually any area of the World Ocean;... as well

⁴⁵ Fabian Hoffmann, "Oreshnik and the End of Arms Control In Europe," *Missile Matters* – with Fabian Hoffmann, November 24, 2024, <https://missilematters.substack.com/p/key-takeaways-from-russias-oreshnik>.

⁴⁶ Evan Hellan Larsen, "Deliberate Nuclear First-Use In An Era Of Asymmetry: A Game Theoretical Approach," *Journal of Conflict Resolution*, Vol. 68, No. 5, 2024, p. 853.

⁴⁷ *Ibid.*, p.867.

⁴⁸ *Ibid.*, pp. 207-209, 221-223.

⁴⁹ Melin, op. cit., p. 3.

⁵⁰ *Ibid.*

⁵¹ Michael Kofman and Anna Loukianova Fink, "Escalation Management and Nuclear Employment in Russian Military Strategy," *War on the Rocks*, September 19, 2022, <https://warontherocks.com/2022/09/escalation-management-and-nuclear-employment-in-russian-military-strategy-2/>; and Stefan Forss, "Russian Nuclear Policy, Doctrine, and Strategy," Glen E. Howard, and Matthew Czekaj, Eds., *Russia's Military Strategy and Doctrine* (Washington, D.C.: The Jamestown Foundation, February 2019), pp. 185-249.

⁵² Available in English as, *Fundamentals of the State Policy of the Russian Federation in the Field of Naval Operations for the Period Until 2030*, July 20, 2017, transl. by Anna Davis, [https://dnnlgwick.blob.core.windows.net/portals/0/NWCDepartments/Russia%20Maritime%20Studies%20Institute/RMSI_RusNavyFundamentalsENG_FINAL%20\(1\).pdf?sr=b&si=DNNFileManagerPolicy&sig=fjFDEgWhpd1ING%2FnmGQXqah5%2FDEujDU76EnksAB%2B1A0%3D](https://dnnlgwick.blob.core.windows.net/portals/0/NWCDepartments/Russia%20Maritime%20Studies%20Institute/RMSI_RusNavyFundamentalsENG_FINAL%20(1).pdf?sr=b&si=DNNFileManagerPolicy&sig=fjFDEgWhpd1ING%2FnmGQXqah5%2FDEujDU76EnksAB%2B1A0%3D), 11.

as a high level of readiness for actions, including strikes on critically important enemy targets.⁵³

That doctrine further extolled nuclear strikes from forward-based platforms, stating that, “development and maintenance of the naval capability to strike ground targets of a potential enemy with conventional as well as nuclear weapons” is a priority of the Russian Navy.⁵⁴

As Michael Petersen wrote, in wartime,

Military forces achieve these missions through pre-conflict and by inflicting specifically assigned damage criteria in local, regional, and strategic conflicts. In regional and strategic conflicts—wars against the North Atlantic Treaty Organization (NATO) in particular—this criterion is met in part via attacks against an adversary’s critical infrastructure. These operations perform the vital function of military signaling during what Russian thinkers term the “period of threat,” and then apply measured force against strategic targets during the ensuing “initial period of war.” Thereafter, these operations also provide a means of escalation management.⁵⁵

The 2022 Maritime Doctrine, which discusses the entire civil and nuclear fleet, is, however, silent about these issues.⁵⁶ Nevertheless Western analysts argue that the approach, utilizing naval strike forces as potential first-strike systems, remains as described in the 2017 doctrine.⁵⁷ William Alberque wrote that,

Among Russia’s carriers of tactical nuclear weapons, it lists “anti-submarine missiles with nuclear warheads placed on surface ships and submarines” and “ship and shore-based anti-aircraft guided missiles with nuclear warheads to defeat enemy air defense groups”. The admission was stunning given the inherent dangers of carrying nuclear weapons at sea even in peacetime.⁵⁸

Clearly the navy has a major nuclear mission that suggests a lowered nuclear threshold.

In September 2020, noted Russian journalist Pavel Felgenhauer wrote, “First, the nuclear threshold is becoming lower: in any serious skirmish, the Russian Navy would either need

⁵³ Ibid.

⁵⁴ Ibid.

⁵⁵ Michael B. Petersen, “Strategic Deterrence, Critical Infrastructure, and the Aspiration-Modernization Gap in the Russian Navy,” in Jeffrey Mankoff, Ed., *Improvisation and Adaptability in the Russian Military* (Washington, D.C.: Center for Strategic and International Studies, 2020), pp. 31-32.

⁵⁶ Maritime Doctrine of the Russian Federation, 31 July 2022, Anna Vest and Ryan Davis, Trans., Russia Maritime Studies Institute, https://dnnlgwick.blob.core.windows.net/portals/0/NWCDepartments/Russia%20Maritime%20Studies%20Institute/20220731_ENG_RUS_Maritime_Doctrine_FINALtxt.pdf?sv=2017-04-17&sr=b&si=DNNFileManagerPolicy&sig=2zUFSaTUSPcOpQDBk%2FuCtVnb%2FDoy06Cbh0EI5tGpl2Y%3D.

⁵⁷ Monaghan and Connolly, Eds., op. cit.; and, Forss, op. cit., pp. 185-249.

⁵⁸ Ibid.

to go nuclear or risk being sunk.”⁵⁹ Russian Navy performance in the war against Ukraine suggests he was correct. The leaked documents from 2024 provide more substantiation that Russia sees naval nuclear weapons as a way of “making Russia’s navy ‘more effective.’”⁶⁰

This lowered nuclear threshold presaged the 2024 doctrine that appeared after Western decisions to transfer some longer-range missiles to Ukraine that can strike Russian territory added another threat that could conceivably lower Russia’s bar to a nuclear first strike, presumably against Ukraine.

This doctrine threatened Ukraine and Western suppliers of missiles to it. It also extended Russian nuclear deterrence to both Belarus and Russian bases abroad, confirming that Russian power projection also possesses a strategic deterrence mission.⁶¹ Subsequently, other rhetorical threats of nuclear escalation have continued, not least because experience has told Moscow they frighten Western audiences.

Procurements

By 2022, it was clear that, “Russian military planners [have been] pursuing a broad range of upgraded and new versions of nuclear weapons,” suggesting “that the[ir] real doctrine goes beyond basic deterrence and toward regional warfighting strategies, or even weapons aimed at causing terror.”⁶² Washington’s withdrawal from the ABM Treaty did not lead Russia to invest in defenses for its ICBMs and other land-based missiles. Instead, Russia invested heavily and asymmetrically in offensive dual-capable missiles, particularly theater and intermediate-range platforms, displaying the offensive nature of its so-called active defense.

In 2018, Putin stated that Russia was developing new capabilities including an ICBM-mounted hypersonic glide vehicle, a nuclear-powered cruise missile, and a nuclear-capable autonomous underwater system. The latter two systems were tested in 2025, according to a 2026 Defense Intelligence Agency (DIA) statement.⁶³ According to 2025 testimony of U.S. Northern Command (NORTHCOM) Commander General Gregory Guillot, “if fielded,” these

⁵⁹ Pavel Felgenhauer, “The Hypersonic Hype and Russia’s Diminished Nuclear Threshold,” Jamestown Foundation, August 6, 2020, <https://jamestown.org/the-hypersonic-hype-and-russias-diminished-nuclear-threshold/>.

⁶⁰ Mark B. Schneider, “The Leaked Russian Nuclear Documents and Russian First Use of Nuclear Weapons,” *Information Series*, No. 579 (Fairfax, VA: National Institute Press, March 18, 2024), https://nipp.org/information_series/mark-b-schneider-the-leaked-russian-nuclear-documents-and-russian-first-use-of-nuclear-weapons-no-579-march-18-2024/.

⁶¹ Stephen Blank, “Gunboat Diplomacy a la Russe: Russia’s Naval Base in Sudan and Its Implications,” *Defense & Security Analysis*, Vol. 38, No. 4, 2022, pp. 1-21, <https://www.tandfonline.com/doi/full/10.1080/14751798.2022.2122204>.

⁶² Hans Kristensen and Matt Korda, “Nuclear Notebook: How Many Nuclear Weapons Does Russia Have in 2022?,” *Bulletin of the Atomic Scientists*, Vol. 78, No. 2, 2022, p. 102, <https://thebulletin.org/premium/2022-02/nuclear-notebook-how-many-nuclear-weapons-does-russia-have-in-2022/>.

⁶³ Statement of Director, Defense Intelligence Agency Lt. Gen. James Adams, USM, Before the Committee on Armed Services Subcommittee on Intelligence and Special Operations, U.S. House of Representatives, 119th Congress, 2027, Budget Posture Hearing, 2026, p. 11, <https://www.congress.gov/119/meeting/house/119162/witnesses/HHRG-119-AS26-Wstate-AdamsJ-20260416.pdf#page=11>.

novel Russian capabilities “will severely challenge [the U.S.] ability to detect and characterize an inbound attack and determine an appropriate response during a conflict.”⁶⁴

This nuclear-capable underwater platform allegedly includes autonomous underwater vehicles (AUVs) with “no global analogues.”⁶⁵ General Guillot also testified about other offensive procurements, namely,

Russian President Vladimir Putin has also announced that [the] Sarmat (heavy ICBM-author) will feature a FOBS [Fractional Orbital Bombardment System] capability that will enable it to approach the homeland via a southern trajectory, hoping to evade our legacy early warning radars. Meanwhile, Russia is increasing its non-nuclear capabilities, including conventionally armed cruise missiles that Russian doctrine envisions using to strike North American critical infrastructure in an attempt to degrade political will, disrupt force flows, and terminate a conflict on terms acceptable to Russia. Throughout 2025, Russia continued to deploy cruise missile launch platforms in the approaches to North America, including multiple heavy bomber patrols near the Alaskan coast and lengthy deployments of Severodvinsk-class submarines.⁶⁶

In addition, a full range of procurements is taking place. First, Moscow, once again violating earlier arms control treaties, is developing a space-based nuclear weapon:

We learned that Russia is developing a new satellite designed to carry a nuclear weapon on orbit—an anti-satellite capability which, if detonated, could potentially wipe out an entire orbit of assets crucial not just to the United States, but the entire world.⁶⁷

This weapon would be most useful as an anti-satellite (ASAT) weapon to blind or destroy American or other satellites early in a conflict. Therefore, this system drives a strong supposition of an intended first or preemptive strike.⁶⁸ It could target critical infrastructure

⁶⁴ “Russia’s Nuclear Weapons,” Congressional Research Service, April 22, 2026, <https://www.congress.gov/crs-product/IF12672>.

⁶⁵ “Russia Confirms Development of Fifth Generation Strategic Nuclear Submarine: How Will It Perform?,” *Military Watch Magazine*, December 23, 2025, <https://militarywatchmagazine.com/article/russia-confirms-development-fifth-gen-strategic-submarine>.

⁶⁶ “Statement of General Gregory M. Guillot, United States Air Force Commander United States Northern Command and North American Aerospace Defense Command,” Before the Senate Armed Services Committee, 19 March 2026, pp. 4-5, https://www.armed-services.senate.gov/imo/media/doc/guillot_opening_statement1.pdf#page=5.

⁶⁷ “Nuclear Threats and the Role of Allies”: Remarks by Acting Assistant Secretary of Defense for Space Policy Dr. Vipin Narang at CSIS,” August 1, 2024, <https://www.defense.gov/News/Speeches/Speech/Article/3858311/nuclear-threats-and-the-role-of-allies-remarks-by-acting-assistant-secretary-of/>.

⁶⁸ “New Russian Anti-Satellite Weapon Revives Fear of Nuclear Conflict In Space,” *El Pais*, December 2, 2024, <https://english.elpais.com/international/2024-12-02/new-russian-anti-satellite-weapon-revives-fears-of-nuclear-conflict-in-space.html>.

like U.S. satellites or SpaceX's Starlink network upon which Ukraine has relied.⁶⁹ Worse yet, the satellite that is allegedly supposed to guide this ASAT's movements has evidently lost its stability in orbit, raising serious questions about Russian command and control of its nuclear weapons and about damage to other states' space-based infrastructures.⁷⁰

Consequently,

This incident is part of a broader trend that deeply concerns military strategists: the **transformation of space into a potential battlefield**. Reports citing U.S. Department of Defense officials indicate that both Russia and China are conducting military training in Low Earth Orbit (LEO). This region, crucial for communication, intelligence, and observation satellites, has become a major strategic asset. The fear is that global powers are developing capabilities to jam, damage, or even **destroy vital space infrastructure** of an adversary in the event of conflict. The opacity surrounding many military space missions, coupled with the development of "dual-use" technologies (civil and military), complicates the assessment of real intentions.⁷¹

Second, there has been an enormous upsurge of intermediate and theater-range dual-capable missiles over the last 20 years, many of which violated the INF Treaty. Allegedly these systems responded to U.S. and NATO deployments in Central and Eastern Europe, including U.S. missile defense programs. But Moscow's desire to leave the INF Treaty long preceded Western deployments. Russia simply refused, consistent with its ingrained threat assessment, to believe that those Western deployments could not strike Russia's land-, sea-, or air-launched missiles.⁷² Thus it decided to violate the INF Treaty systematically.

Russia can produce 2,500 dual-capable ballistic missiles annually and is now stockpiling them, presumably for Ukraine. Given Western intelligence warnings about a Russian-initiated war between 2027 and 2035, the possibility of nuclear strikes due to European involvement in Ukraine, or in a subsequent attack on a NATO ally cannot be excluded. This is especially concerning since there is little reliable information concerning the estimated 1,000-2,000 Russian tactical nuclear weapons (TNWs) that apparently mainly belong to the Russian Navy and therefore can strike European targets. Meanwhile, Russian procurement of nuclear weapons continues without reliable verification because the arms control regime collapsed (largely due to Russian cheating). Therefore, monitoring those weapons' numbers or missions is impossible.

⁶⁹ Ross Dixon, "Capable of Guiding Nuclear Weapons, the Russian Satellite Cosmos 2553 Has Gone Out of Control," *Farmingdale Observer*, May 1, 2025, <https://farmingdale-observer.com/2025/05/01/capable-of-guiding-nuclear-weapons-the-russian-satellite-cosmos-2553-has-gone-out-of-control-experts-are-sounding-the-alarm/>.

⁷⁰ Ibid.

⁷¹ Eirwen Williams, "US on High Alert: Pentagon Confirms Mysterious Signal Traced to Russian Space Anomaly Now Feared as Major Threat," *Sustainability Times*, May 3, 2025, <https://www.sustainability-times.com/policy/us-on-high-alert-pentagon-confirms-mysterious-signal-traced-to-russian-space-anomaly-now-feared-as-major-threat/>. (Bold in original).

⁷² Forss, op. cit., pp. 185-249.

Exercises

Exercises are a key element of any deterrence posture and can seriously impact strategic stability. Exercise scenarios provide insight into states' assessments of their adversary's intentions and the kind of operations for which armed forces are preparing. How states choose to communicate—or not to communicate—around their exercises is also a relevant factor in deterrence. In particular, the concentration of forces that can occur in exercises tends to heighten the adversary's security concerns, especially when intentions are not clearly communicated or there are good reasons not to trust what is being communicated.⁷³

This holds true for both NATO and Russia. Moreover, exercises display capabilities and their intended uses, making them a key building block in any deterrence posture. The communication or lack thereof that surrounds such activity conveys messages to both allies and adversaries, whether to reassure, deter or both.⁷⁴

In June 2024, the Russian Navy rehearsed procedures consistent with the use of TNWs and Russian doctrine. These exercises involved the nuclear-capable Kinzhal hypersonic and Iskander missiles which can carry TNWs, suggesting a rehearsal of nuclear weapon scenarios involving TNWs.⁷⁵

Other naval exercises and revelations from leaked documents also pointed towards a first strike. In September 2024, Russia's armed forces practiced loading Soviet-era P-270 anti-ship cruise missiles onto a Tarantul-class corvette in Kaliningrad, where NATO officials say it stores an undeclared stockpile of tactical nuclear warheads. Footage of the drills showed troops of Russia's 12th Main Directorate (or GUMO), the forces tasked with control of nuclear weapons, practicing moving the missile in the container they would use to move a fully nuclear-armed missile, accompanied by the appropriate guard force and procedures for handling a nuclear warhead.⁷⁶

Similarly leaked documents dating from 2008-2014 had apparently mapped out hundreds if not thousands of targets including (as advocated in the 2017 naval doctrine) military and critical infrastructure targets. According to those documents, once Russia's military engaged with NATO forces, presumably in the Baltic States and Poland, targets all over Europe (if not in the North Atlantic) would be immediately at risk of a first strike, thereby risking total war. Analysts of these documents found language adumbrating the 2017 *Maritime Doctrine*. The documents cited the navy's high maneuverability, i.e., ability to conduct sudden and pre-emptive blows and massive missile strikes from various directions.

⁷³ Barbara Kunz and Aino Esser, "Calibrating Deterrence: Disruptors of Strategic Stability on NATO's New Northern Flank," Stockholm International Peace Research Institute, March 2026, https://www.sipri.org/sites/default/files/2026-03/0326_calibrating_deterrence.pdf.

⁷⁴ Ibid., p. 16.

⁷⁵ Xiadon Liang, "Russia Links Nonstrategic Nuclear Exercises to Threats," Arms Control Association, *Arms Control Today*, June 2024, <https://www.armscontrol.org/act/2024-06/news/russia-links-nonstrategic-nuclear-exercises-threats>.

⁷⁶ Anna Maria Dyer, "Ocean 2024 Exercises Demonstrate Russian Naval Capabilities, Strategic Signaling," Polish Institute of International Affairs, September 26, 2024, <https://pism.pl/publications/ocean-2024-exercises-demonstrate-russian-naval-capabilities-strategic-signalling>.

The documents further added that nuclear weapons are “as a rule” designated for use “in combination with other means of destruction” to achieve Russia’s goals.⁷⁷ Analysts reviewing the documents said they coincided with NATO’s threat assessment of long-range missile strikes by the Russian navy and the speed with which Moscow would probably resort to nuclear use. Moreover, the documents revealed a low threshold for nuclear use in first-strike or preemptive modes in Europe by saying that nuclear weapons could be used to contain aggression against Russia or for escalating conflicts.⁷⁸

Similarly, these documents revealed the Russian Navy’s “hit list” of targets from the United Kingdom and France’s Atlantic Coast through the Baltic that it would attack with nuclear-capable missiles in a first-strike mode.⁷⁹ One particular document also cited an option for a “demonstration strike” in a remote area “in a period of immediate threat of aggression” before actual conflict, i.e., before Russian aggression.⁸⁰ Given Putin’s June 2024 statement that the West would be “more or less defenseless” against Russian missile strikes, this document strongly supports the view that Moscow has a first-strike nuclear doctrine and strategy, despite its rhetoric to the contrary.⁸¹

Russian naval exercises confirm that these leaked documents are not isolated examples of deployments and tests publicized by Moscow to intimidate and raise the likelihood of nuclear first-strike employment. In 2022, when the Red Army suffered serious battlefield reverses, U.S. intelligence received signals not only that generals and other Kremlin propagandists were advocating first-strike nuclear use against Ukraine, presumably using TNWs, but that Putin, too, “almost” authorized their use.⁸² Furthermore, the deployment of nuclear-capable missiles on surface ships, as Albecque noted above, clearly violates the 1991 Soviet-American agreement banning such deployments, a violation consistent with Moscow’s wholesale violation of innumerable treaties pertaining to both nuclear weapons and European security.

These findings are not the only alarming Russian indicators of a heightened propensity for risk-taking and contempt for arms control treaties. Besides the never-ending rhetorical threats and so-called “redlines,” all of which have been broken without any nuclear escalations, at least four other escalations within the current framework of Russian behavior

⁷⁷ Max Seddon and Chris Cook, “Russian Navy Trained to Target Sites Inside Europe with Nuclear-Capable Missiles,” *Financial Times*, August 12, 2024, <https://www.ft.com/content/237e1e55-401d-4eeb-875b-03fe68f81575>.

⁷⁸ Ibid.

⁷⁹ Ibid.; and, Mark Schneider, “The Zapad-2025 Theater Military Exercise: More Russian Nuclear Intimidation,” *Information Series*, No. 642 (Fairfax, VA: National Institute Press, November 3, 2025), https://nipp.org/information_series/mark-schneider-the-zapad-2025-theater-military-exercise-more-russian-nuclear-intimidation-no-642-november-3-2025/m

⁸⁰ Ibid.

⁸¹ Ibid.

⁸² John O’ Sullivan, “Vladimir Putin ‘Almost’ Used Nukes in Ukraine as Intelligence Chiefs Warn of ‘Threat to World Order,’” *Irish Star*, September 9, 2024, <https://www.irishstar.com/news/us-news/russia-putin-nuclear-weapons-ukraine-33625656>.

suggest greater reliance on nuclear weapons and an increased tolerance for risk taking.⁸³ For example, a deserter from a nuclear weapons base revealed that from the beginning of the invasion of Ukraine, nuclear weapons were fully in place and ready for a launch if the order came. Moreover, work to maintain this readiness is unceasing.⁸⁴

Also, in 2022, Defense Minister Sergei Shoigu and Chief of the General Staff, General Valery Gerasimov, contacted their American and British opposite numbers with fabricated stories of an imminent Ukrainian dirty bomb. Russia's Ambassador to the UN similarly wrote to the UN Secretary-General. And, the Ministry of Defense announced preparations for acting in a radioactive environment. These actions evidently aimed to create a pretext for a nuclear first strike.⁸⁵ Strong U.S., Chinese, and Indian remonstrations with Moscow averted that outcome. But Russia continues making rhetorical and/or actual threats.

Third, just before the aggression against Ukraine, Russian naval exercises sent the Northern Fleet into the North Atlantic and the Black Sea Fleet, Mediterranean Eskadra, (Squadron), and air assets into the Mediterranean and the North Atlantic to exercise interdicting an organized NATO response in support of Ukraine. Russia thereby risked a preemptive strike on NATO fleets that could easily trigger Russian nuclear first strikes against NATO naval and air assets.⁸⁶

In December 2021, ships from the Pacific Fleet entered the Mediterranean for exercises there. In February 2022, Defense Minister Shoigu witnessed exercises in the Eastern Mediterranean that showcased, "exercises in operationally important areas of the World Ocean, as well as in the waters of the seas adjacent to Russia." This last statement underscores that Moscow considers the Mediterranean a sea adjacent to Russia, part of Russia's global naval ambitions. Here the ships of the Mediterranean Eskadra performed, "measures to search for foreign submarines, establish control over navigation in the Mediterranean Sea and the flight of aircraft over it." Here, too, the potential nuclear dimension is visible as Moscow sent airplanes carrying nuclear-capable missiles to Russia's Khmeimim air base in Syria. They included, "MiG-31K fighter jets containing hypersonic Kinzhal missiles and long-range Tupolev Tu-22M strategic bombers, intended to be used in military exercises in the Eastern Mediterranean." These exercises also aimed to target enemy warships, e.g., the American carrier strike group in the Mediterranean.

In January 2022, the Northern Fleet, ostensibly conducting exercises, surged into the North Atlantic, off Ireland's coast, astride the main sea lines of communication from North America to northern Europe. This activity was part of a larger exercise "involving 140 combat and supply ships from all four fleets, from the Pacific to the North Atlantic. Three of

⁸³ Mattelaer, *op. cit.*

⁸⁴ Will Vernon, "Russian Deserter Reveals Secrets of Guarding Nuclear Base," *BBC*, November 25, 2024, <https://www.bbc.com/news/articles/c9dl2pv0yj0o>.

⁸⁵ Heather Williams, Kelsey Hartigan, Lachlan MacKenzie and Raja Younis, "Deter and Divide: Russia's Nuclear Rhetoric & Escalation Risks in Ukraine," Center for Strategic and International Studies, December 4, 2023, <https://features.csis.org/deter-and-divide-russia-nuclear-rhetoric/>.

⁸⁶ Blank, "Gunboat Diplomacy à la Russe," *op. cit.*, pp. 1-21.

the Northern Fleet's amphibious assault ships that in mid-January were flexing muscles in the Baltic Sea and made Sweden . . . increase military readiness, sending troops to the island of Gotland, and then sailing into the Mediterranean." They were likely sailing to the Black Sea. Another assessment of these exercises noted that training maneuvers of the Northern Fleet in the Barents Sea began in January 2022. During the exercises, the participating forces practiced maritime communications protection, including in crisis situations. A few days before the war, about 20 Russian ships entered the Barents Sea to search for foreign submarines, and to establish control over navigation there, as well as the airspace above. Those activities aimed to prepare the ground for potential Russian nuclear ballistic missile submarine (SSBN) operations. During the attack on Ukraine, the Project 1144 cruiser Peter the Great remained in the Barents Sea to guard Russian SSBNs against NATO's possible entry into the conflict.⁸⁷

Fourth and more recently, the Zapad-2025 exercises, for the first time, began not with a conventional threat or attack but with a scenario involving TNW strikes against Europe, signifying Russia's growing interest and possible readiness to begin a war with Europe with a seemingly limited nuclear strike.

In Zapad-2025, Russia and Belarus practiced non-strategic nuclear weapons use. Just before it, TASS, Russia's main official news agency, reported the exercise involved "...planning nuclear weapons deployment, including the use of the Oreshnik system [dual-capable MIRVed intermediate-range ballistic missile]." In Zapad-2025, Russia also showcased its dual-capable hypersonic missiles. This exercise was preceded and followed by gross Russian provocations, including an apparently deliberate drone attack against Poland and the violation of Estonian airspace by three Russian Mig-31 nuclear-capable fighters.⁸⁸

Russian nuclear forces also contribute to growing nuclear threats in Northeast Asia.⁸⁹ Therefore, considering the Sino-Russian entente as expressed in increasing maritime and aerial probes against Japan, South Korea, the Pacific coast of Alaska, and even Hawaii, the possibility of Russian, as well as Chinese and North Korean missile strikes cannot be overlooked.⁹⁰ Therefore, it is also necessary to examine the leaked reports of a potential Russian attack against Japan. Here again, Russia prepared detailed target lists comprising hundreds of civilian infrastructure and high-ranking military targets for missile strikes against Japan and South Korea in August 2021. These target lists appeared in a presentation explaining the capabilities of the non-nuclear KH-101 cruise missile. Although the lists were

⁸⁷ Ibid.

⁸⁸ Schneider, "The Zapad-2025 Theater Military Exercise: More Russian Nuclear Intimidation," op. cit.

⁸⁹ Victor Cha, "North Korea as It Is: The Case For a Cold Peace," *Foreign Affairs*, April 21, 2026, <https://www.foreignaffairs.com/north-korea/north-korea-it-victor-cha>.

⁹⁰ "U.S. Coast Guard responds to Russian spy ship off Honolulu," *The Watch*, December 8, 2025, <https://thewatch-journal.com/2025/12/08/u-s-coast-guard-responds-to-russian-spy-ship-off-honolulu/>.

circulated in 2013-2014, they show that these plans also included typical preparations for what Moscow assumed would be a localized conflict.⁹¹

Apart from the senselessness of an unprovoked attack upon Japan, such plans amount to dropping a lighted match into a pool of gasoline. As South Korean ambassador Wi Sung-Lac has observed, even if Russia prevailed in Ukraine, a weakened and isolated Russia would more likely play a spoiler rather than a constructive role in East Asia. And this preceded its alliance with North Korea.⁹² Moreover Russia's increasing dependence upon both North Korea and China to prosecute this war underscores the risk that in either a Taiwan or Korean contingency Russia may be dragged into what already threatens a rapid escalation to a nuclear conflict. Alternatively, those two states may feel the need to rescue Russia or challenge the West. Thus, Admiral Rob Bauer, Chairman of NATO's Military Committee, warned that, "The scenario that greatly concerns NATO is that if China coordinates actions involving Russia and Taiwan, it would be highly beneficial for them if Russia were to attack one of the Allies."⁹³ Similarly, Danish intelligence warns that ties with China embolden Russia, which could attack Europe within a year after ending the war in Ukraine while Chinese cyber capabilities are on a par with U.S. capabilities.⁹⁴

These documents suggest that Putin's egregious strategic failure in Ukraine, i.e., the short-war illusion, was no accident but rather a predictable consequence of Russian policymaking.⁹⁵ Second, as in Ukraine, there undoubtedly would have been nuclear threats accompanying these missile strikes. Third, these plans seriously undermine the presumption of policymakers' rationality that pervades much of deterrence theory. Who in his right mind could believe that Japan and South Korea would not strike back and that U.S. policymakers would not reply forcefully? Given the evidence of these plans, the reality of Putin's growing paranoia, and mounting signs of a true crisis of the state, a watchful and vigorous deterrence is now urgent.

⁹¹ Isabel Van Brugen, "Russia Planned To Attack Japan in 2021: Leaked FSB Letters," *Newsweek*, November 24, 2022, <https://www.newsweek.com/russia-planned-attack-japan-2021-fsb-letters-1762133>; and Chris Cook and Max Seddon, "Russia trained officers for attacks on Japan and South Korea," *Financial Times*, December 31, 2024, <https://www.ft.com/content/d345a6e7-2d72-4dcb-9c12-76d571ba75eb?syn-25a6b1a6=1> for attacks on Japan and South Korea.

⁹² Yang Xiangfeng, "Toward a Eurasian security complex? The Two Koreas' entanglement in the Ukraine war and the conjoining of European and Asian security," *Asia-Europe Journal*, Vol. 24, August 15, 2025, p. 272, <https://link.springer.com/article/10.1007/s10308-025-00742-3>.

⁹³ Olena Mukhina, "Rob Bauer just named NATO's alarming scenario involving Russia and Europe," *Euromaidan*, April 19, 2026, <https://euromaidanpress.com/2026/04/19/rob-bauer-just-named-natos-alarming-scenario-involving-russia/>.

⁹⁴ Perkin Amalaraj, "Russia preparing for war with NATO, European spy agency warns," *Daily Mail*, April 29, 2026, <https://www.msn.com/en-nz/news/other/russia-preparing-for-war-with-nato-european-spy-agency-warns/ar-AA21trz1>.

⁹⁵ Vladimir Gel'man, *Russia's Gamble: The Domestic Origins of Russia's Attack on Ukraine* (Cambridge, UK and Hoboken, NJ: Polity Press, 2025).

Russian Objectives

When we correlate these exercises with procurement, official doctrine, and rhetoric, it becomes clear that Russia's conventional and nuclear first strike and preemptive missions, primarily employing regional and theater missiles, represent real threats to the West. Moreover, Moscow habitually invokes them for good reasons beyond intimidating the West. Indeed, intimidating the West is merely a means to an end or to several ends.

Russia's ultimate objective is survival of the regime, not only as an empire but also as a patrimonial autocracy. Putin's imperial drive, as Arbatov noted above, derives from his system's domestic dynamics. But Russia's more immediate objectives are concerned with undermining the post-Cold War settlement in Europe. Specifically, Ukraine's sovereignty, if not its territory, must be suborned; NATO must retreat to its 1997 boundaries, i.e., before enlargement; and Russia must regain an uncontested sphere of influence across Central and Eastern Europe as well as in the Caucasus and Central Asia. Only by this territorial-strategic revisionism can the regime's unchallenged domestic power survive because Putin's system is clearly under mounting stress.

The problem for foreign governments is that this imperial restoration, given the abiding nature of Putin's system, cannot bring peace because Russia will not believe itself to be secure, not least because empire means the forcible diminution of subject territories' sovereignty and integrity. Thus, a Russian empire is incompatible with European security and perpetuates the state of siege spanning all of Europe. So, to ensure a lasting Russian defeat that upholds the post-Cold War settlement, a credible European-based deterrence should be implemented sooner rather than later.

Conclusions for Western Deterrence

Under the circumstances, conventional and nuclear deterrence of Russia in Asia and Europe should be reinvigorated. Today's situation resembles the 1980s. Europe and the United States then confronted an analogous threat of an immense asymmetry regarding theater or short- and intermediate-range Soviet nuclear and conventional missiles that targeted the continent.

The response then was Pershing-2 and cruise missiles based in Europe that held the USSR at risk if it attacked. Today, defenses are available but given the cost and time needed to build them, it seems more cost-effective for NATO to deploy theater capable weapons. Today, NATO is at a strategic disadvantage that can be quickly redressed by deploying missiles in central and Eastern Europe.⁹⁶ Thus, the Trump Administration's decision out of pique to break the 2024 U.S.-Germany agreement to deploy IRBMs ranging from 460-2,700

⁹⁶ Luis Simon and Alexander Lanoszka, "The Post-INF Missile Balance: Thinking About NATO's Deterrence Strategy," *Texas National Security Review*, Vol. 3, No. 3, 2020, https://tnsr.org/wp-content/uploads/2020/05/02_TNSR-Journal-Vol-3-Issue-3-Lanoszka.pdf.

km exemplifies the strategic mistakes that typify the Trump Administration.⁹⁷ Although the sea-based SLCM-N admirably fits the bill for defending Europe, it has yet to be built in sufficient number to make a difference.

Therefore, restoring trust among allies that the Administration has so wantonly and recklessly abused is the key priority for defense. By doing so, it is not only possible to advance U.S. interests but also to deter Russia and China. Only that will allow a defense pivot to Asia, and in particular China, which is rightly termed the “pacing threat.” Therefore, collaboration with Europe to strengthen European economies, thereby enabling them to sustain a coherent, credible, and thriving, competitive defense-industrial sector is urgently needed. The consequences and implications of Ukraine’s success should be disseminated and assimilated across Europe to deter Russia at the lowest level of conflict. This means nuclear and modernized conventional deterrence and an enhanced societal resilience and retaliatory capability against Russia’s non-kinetic probes.

Even if peace broke out tomorrow, Putinism, a system fully consonant with Russian imperial tradition, would continue threatening Europe and Asia, if not beyond. The only way, then, to engender a lasting peace in Eurasia is ultimately regime change in Russia. Obviously, this cannot be NATO’s strategy, either openly or implicitly. But containment of Russia within its present treaty-sanctified borders can be that strategy. As George Kennan foretold and history validated, containment generates internal pressures inside Russia that only find their outlet in domestically driven reform or regime change. Two things are needed to bring about that change: defeat of Russia in Ukraine and Ukrainian membership in NATO.

Russia’s defeat in Ukraine is the precondition for reform, if not regime change, in Russian history. Since the autocratic imperial state is optimized for war, defeat imposes upon it the need for reform just as the defeats in the Crimean, Russo-Japanese wars, Afghanistan and the Cold War did. Only if Russia is defeated—and decisively so—will not only Ukraine but also Europe be safe from Russia’s revanchism. For the same reason Ukraine should become a full member of NATO and the EU. Ukraine’s tragic experience since 2014, when Putin seized Crimea, indicates that only its membership in NATO, adding its own credible defense to NATO, will deter Russian attempts at imperial restoration. Since a Russian empire is incompatible with European security, only if Ukraine is secured by credible deterrence—and NATO is the only credible European security organization—can it and Europe be secure against Russian efforts to restore its empire. Clearly, this security comprises not only defense and retaliatory capability against “hybrid attacks” but also conventional and nuclear deterrence.

Ideally, and because any new Russian empire in Europe would be, what Thomas Jefferson called, “a breakfast for Bonaparte,” this deterrence must include an active American role. If commentary on Europe agrees on anything it is that the U.S. position in

⁹⁷ “US considers scrapping long-range missile deployment in Europe,” *Le Monde*, May 5, 2026, https://www.lemonde.fr/en/international/article/2026/05/05/us-considers-scrapping-long-range-missile-deployment-in-europe_6753150_4.html.

Europe that the Trump Administration seems intent on demolishing is instead in America's vital interests and confers immense benefits upon it. Current U.S. policy runs counter to those interests and, as already is becoming visible, undermines our global power and reputation. That trend can only augment the threats to international security and that cannot be in the U.S. or its allies' interests.

Stephen Blank is Senior Fellow at the Foreign Policy Research Institute. This is an updated and revised version of his March 23, 2026 article, "Reflections on Russia's Nuclear Behavior," published by the Kennan Institute and available at <https://www.kennaninstitute.org/articles/reflections-on-russias-nuclear-behavior>.



PROCEEDINGS

TOWARD A FREE AND UNIFIED KOREA— RESOLVING THE KOREA CHALLENGE AT ITS SOURCE

The remarks below were delivered at a symposium on “Toward a Free and Unified Korea—Resolving the Korea Challenge at Its Source” hosted by the National Institute for Public Policy on May 19, 2026. The symposium highlighted the findings and conclusions of a recent study published as a National Institute Information Series assessing the importance of Korean unification and making recommendations to advance the prospects for a free, democratic, prosperous, and unified Korean peninsula.

David J. Trachtenberg (moderator)

David J. Trachtenberg is Senior Scholar at the National Institute for Public Policy and previously served as Deputy Under Secretary of Defense for Policy.

Although recent events have shifted public attention to other issues and threats, North Korea remains a serious security problem. Despite President Trump’s personal diplomacy efforts during his first term to engage Kim Jong Un, North Korea continues to develop its nuclear and missile program. In addition, Pyongyang reportedly has sent weapons to Russia and North Korean troops are fighting alongside Russian forces against Ukraine. North Korea also continues to rely heavily on economic and other assistance from China, where President Trump just concluded a summit with Xi Jinping.

Despite decades of effort by the United States to change the security calculus of the Kim dynasty with both sticks and carrots, the North Korean regime remains hostile to the United States and the West, deprives its citizenry of basic human rights, remains ideologically rigid in its internal and external affairs, and continues to pursue policies that threaten peace and stability not just on the peninsula but on a wider level. In retrospect, it seems that a reboot of U.S. policy toward North Korea is warranted.

The study co-authored by our panelists that we recently published argues for just such a reboot.¹ And while I will leave it to them to discuss its conclusions and recommendations, I would like to briefly highlight some of its relevant points.

First, it acknowledges that U.S. policy, which has typically focused on the denuclearization of North Korea first and foremost, has failed to achieve the desired results. While acknowledging that the North Korean nuclear threat “continues to expand,” the question of whether the denuclearization issue should have been prioritized to the exclusion of other human rights and civil society issues is one the study addresses. Indeed, in discussing North Korea at the recent Beijing summit, the White House noted that “President

¹ Robert Joseph, Nicholas Eberstadt, James Flynn, Hyun-seung Lee, Michael Marshall, David Maxwell, and Greg Scarlatoiu, “Toward a Free and Unified Korea—Resolving the Korea Challenge at Its Source,” *Information Series No. 658* (Fairfax, VA: National Institute Press, April 27, 2026), https://nipp.org/information_series/robert-joseph-nicholas-eberstadt-james-flynn-hyun-seung-lee-michael-marshall-david-maxwell-and-greg-scarlatoiutoward-a-free-and-unified-korea-resolving-the-korea-challenge-at-its-source/.



Trump and President Xi confirmed their shared goal to denuclearize North Korea.”² This is the only reference to discussions of North Korea in the post-summit White House Fact Sheet.

Second, the study argues that there is a viable path toward Korean unification that can lead to a free, democratic, and unified Korean peninsula. The objective of unification, it notes, “must incorporate both geopolitical and cultural dimensions” and should be seen as the embodiment of a “shared heritage” between the North and the South.

Third, it challenges some of the conventional wisdom that suggests this goal is unobtainable, addressing some of the “persistent myths” that have, in the study’s words, “discouraged serious strategic planning for Korean unification.” These include concerns that unification will be opposed by China, be inordinately expensive, result in a weakening of the strategic partnership with the United States, and lead to war.

Finally, it offers multiple recommendations for U.S. and allied policymakers to help accelerate an end to what the study calls the “structural anomaly” of a divided Korea.

The notion of a unified Korea that is free, prosperous, and no longer a nuclear threat may not be as far-fetched as some would believe. And the topic is actually quite timely. Within days of the study’s publication, it was reported that North Korea has officially revised its constitution, for the first time deleting all references to unification and explicitly declaring its territorial boundaries.³ Perhaps Pyongyang actually fears that a reunified Korean peninsula may be the death knell for the system of governance that currently rules in the North and the end of the Kim dynasty. Interestingly, this was followed yesterday by release of a new South Korean White Paper that, while still expressing support for ultimate unification as a longer-term goal, also changes its earlier tone and argues for a “two-state relationship.”⁴

With this backdrop, how best to bring about a free and unified Korea is the subject of today’s discussion.

² The White House, “Fact Sheet: President Donald J. Trump Secures Historic Deals with China, Delivering for American Workers, Farmers, and Industry,” May 17, 2026, <https://www.whitehouse.gov/fact-sheets/2026/05/fact-sheet-president-donald-j-trump-secures-historic-deals-with-china-delivering-for-american-workers-farmers-and-industry/>; Anton Sokolin, “US, China to work on denuclearizing North Korea: White House,” *NK News*, May 18, 2026, <https://www.nknews.org/2026/05/us-china-to-work-on-denuclearizing-north-korea-white-house/>.

³ Kyu-seok Shim, “North Korea revises constitution to drop references to unification of Korean Peninsula,” *Reuters*, May 6, 2026, <https://www.reuters.com/world/china/north-korea-revises-constitution-drop-references-unification-korean-peninsula-2026-05-06/>.

⁴ Woo Jae-yeon, “Unification white paper pivots to peaceful ‘two-state’ coexistence with N. Korea,” *Yonhap News Agency*, May 18, 2026, https://www.upi.com/Top_News/World-News/2026/05/18/Unification-Ministry-white-paper-peaceful-coexistence-North-Korea/3381779093017/.

Robert G. Joseph

Robert G. Joseph is former Under Secretary of State for Arms Control and International Security, Senior Scholar at the National Institute for Public Policy and a member of the Board of the Committee for Human Rights in North Korea.

Good afternoon, everyone. David, thank you for the invitation to join you and for the opportunity to highlight our report. As you mentioned, the report is the product of a working group that I had the privilege of chairing. In addition to the three other members who are speaking here today, the group included James Flynn, President of the Global Peace Foundation; Dr. Nick Eberstadt from the American Enterprise Institute (AEI) and an internationally recognized expert on political economy; and David Maxwell, Vice President of the Center for Asia Pacific Strategy and a former special forces officer with over 30 years of experience in Asia.

All working group members shared the view that, for over three decades, U.S. and international policies have failed to meet the threat from North Korea. The almost exclusive focus on denuclearization provided time and concessions to the Kim regime that would not only fail to end the North's nuclear program but would contribute to today's situation. Pyongyang is making as many nuclear weapons as fast as it can – from both enriched uranium and plutonium. The size of its rapidly growing arsenal is often estimated at 60 to 80 weapons, but given the many uncertainties, it could be much larger.

A Rand report from several years ago suggested the North could have over 200 weapons by 2027, supported by a similarly aggressive missile build up that today threatens the entire American continent. And the threat, despite little attention being paid to it, is only getting worse. Whether it's 2027 or 2030, just imagine what North Korea might do with 200 nuclear weapons.

Looking at this monumental failure of policy, all members of the working group thought it essential to take a fundamentally different approach to countering the full spectrum of threats from North Korea. That approach is outlined in our report. We conclude that the underlying national security challenges on the peninsula—as well as the human rights nightmare that defines life in the North—can only be resolved by ending the artificial division of the peninsula and the establishment of a free and unified Korea.

Looking at the prospects for unification from a geostrategic, cultural and economic perspective, we conclude that a unified and democratic Korea is achievable. We debunk the myths that have long impeded any substantial effort to work toward unification. In fact, we find that unification is the only durable solution to the security threats and human rights catastrophe that plays out every day in the North.

You can read the findings and conclusions in the report. Hyun-seung, Greg, and Michael will provide further context for the report and address a number of the key issues. I will follow their comments with a brief list of our policy recommendations. So let me stop here and turn it over to Hyun-seung.

Hyun-Seung Lee

Hyun-Seung Lee is a North Korean escapee, the lead strategist at the Global Peace Foundation, the founder of North Korean Young Leaders Assembly and a guest contributor to UPI. He has prior experience in North Korea's shipping and mining sectors and as a sergeant in the DPRK Army Special Force. He fled in 2014 due to severe governmental purges. He holds a bachelor's degree in economics from Dongbei University of Finance and Economics and a master's degree in public administration from Columbia University.

Introduction

North Korea no longer publicly champions Korean reunification as an aspirational, forward-looking policy objective. What was once a foundational national ideal—sustained for over seven decades—has been supplanted by a framework that redefines the two Koreas as mutually hostile, sovereign states.

Yet this shift is better understood not as an abandonment of reunification as a goal, but as a strategic reinvention of how that goal is to be achieved under Kim Jong Un. North Korea has moved away from a concept of reunification grounded in inter-Korean dialogue and ethnic solidarity, toward one defined by nuclear deterrence, asymmetric pressure, and leveraged dominance over the South. Reunification has not disappeared from North Korea's long-term agenda—it has been recast as an outcome achievable only on Pyongyang's terms.

The Roots of the Policy Shift

For decades, North Korea's reunification logic was anchored in three core principles: independence, peaceful means, and great national unity—the so-called “Three Principles of Fatherland Reunification.” Seoul was consistently portrayed as occupied territory, with the narrative that South Koreans, once freed from American domination, would naturally embrace the North's revolutionary system.

Under Kim Jong Un, however, this framework has been displaced by a calculus centered on regime survival and strategic security. The pivotal turning point was North Korea's self-declaration as a nuclear-armed state, having effectively completed a strategic arsenal capable of threatening the continental United States with long-range missiles and nuclear warheads. With that capability in hand, Pyongyang calculated that it stood to gain more by holding firm in a position of relative parity with Washington than by pursuing the difficult compromises and negotiations that genuine reunification efforts would require.

The Retreat of the “Our Nation” Strategy

During the period before North Korea had consolidated its nuclear deterrent, Pyongyang still invested in the hope that the “Our Nation First” strategy could pry South Korea away from the United States. The logic was that by eroding domestic South Korean support for the U.S.

military presence through anti-American propaganda and political influence, North Korea could ultimately shape the peninsula according to its will. Over decades, Pyongyang expanded inter-Korean outreach under the banners of ethnic reconciliation, tourism, economic cooperation, and people-to-people exchange—yet the original objective of driving out U.S. forces and shifting South Korean public opinion was never achieved.

North Korea is now deliberately dismantling the very framework of shared ethnic nationhood. By declaring the two Koreas “two hostile states,” Pyongyang has repositioned South Korea—no longer as a partner to be persuaded and courted, but as an adversary to be subdued, if necessary, through military force and nuclear coercion. This is not merely a rhetorical shift. It can be read as a formal reopening of the possibility of coercive reunification, achieved not through persuasion but through military and nuclear dominance.

In short, North Korea is not simply speaking of reunification as a matter of choice—it is rewriting the conditions under which reunification occurs, with its military and nuclear capabilities as the decisive instrument.

Strategic Refinement and the Changing Role of Nuclear Weapons

On the surface, the Kim Jong Un regime appears to have chosen permanent division—or “hostile coexistence”—over reunification. The demolition of inter-Korean rail links and liaison offices, the formal designation of Seoul as a hostile state, the closure of cross-border channels, and the institutionalization of a dual-state structure all seem to support this reading.

But this is more accurately understood as a refinement of strategy, not a surrender of purpose. Kim Jong Un once stated, in effect, that North Korea would not use nuclear weapons against fellow Koreans—framing Pyongyang’s arsenal as fundamentally a deterrent against the United States, not a weapon to be turned on the South.

The “two hostile states” declaration, however, quietly unravels that premise. If South Korea is no longer “our people” but an enemy state, North Korea’s nuclear posture can be reframed accordingly—not merely as deterrence against America, but as a viable military option against the South, including the possibility of preemptive use. From Pyongyang’s vantage point, the implications are clear: South Korea is no longer “us,” North Korea has freed itself from the ethical and political constraints that once prohibited nuclear use against fellow Koreans, and statements suggesting the military “pacification” or conquest of the South are recurring with greater frequency.

This trajectory does not signal the abandonment of reunification. It signals a change in method and timing—from negotiated integration to coercive, military-backed imposition.

Outlook and Strategic Implications

In the near term, there is little indication that North Korea intends to return to a diplomacy-centered approach to reunification. The Kim Jong Un regime’s policy trajectory remains fixed

on a combination of nuclear deterrence, strategic alignment with Russia and China, intensified internal control, and the permanent securitization of its posture toward Seoul.

That said, several shifting variables could prompt North Korea to revisit reunification diplomacy:

- A fundamental transformation in U.S.–North Korea relations;
- A significant degradation of North Korea’s nuclear deterrent capacity through intensified sanctions or internal instability;
- A strategic reorientation by China or Russia on Korean Peninsula policy; and
- A severe economic crisis or a succession crisis within North Korea.

Absent such shifts, the most accurate characterization of North Korea’s current posture is this: Pyongyang has not abandoned its ultimate objective of absorbing and dominating South Korea. It has, however, replaced the instruments of that objective—moving from negotiation, alliance-building, and social integration, to nuclear coercion and military pressure—while pursuing a structure in which the timing and conditions of reunification remain entirely under North Korea’s control.

Policy Recommendations for the United States: From Management to Resolution

Over the past three decades, the United States has experienced repeated failures in negotiations over North Korea’s nuclear program and human rights record. The root cause of these failures, however, is not flawed American policy or deficient negotiating technique—it is the Kim regime’s overriding imperative of self-preservation. Pyongyang’s strategy and posture have systematically prevented any negotiation from producing meaningful progress. Equally important is the fact that Washington was persistently slow to accurately assess the fundamental nature of the Kim dictatorship.

In light of this history, the arms control and disarmament negotiations currently gaining renewed attention are unlikely to offer Kim Jong Un sufficient incentive to engage genuinely—and there is no guarantee that North Korea would participate in such a process with the transparency and good faith that it requires. The probability is high that any such effort ends in yet another failure.

The United States must therefore shift its foundational objective: from managing the North Korean threat to resolving it. That resolution is a free and unified Korean Peninsula. Reunification represents the most durable and comprehensive answer to the intertwined challenges of North Korea’s nuclear program, its systematic human rights abuses, and the freedom of its people.

With that resolution and objective defined, what remains is execution—and that is the task of American policymakers, strategists, and practitioners. Specifically, U.S. policy must:

- Develop a clear-eyed understanding of the nature of the Kim regime—its nuclear ambitions, its human rights record, and its fundamental character as a system;

- Pursue a strategy centered not on negotiation and concession, but on regime transformation and the liberation of the North Korean people;
- Deter and counter North Korea's pursuit of coercive reunification on its own terms; and
- Strengthen the solidarity between the people of South Korea and the people of North Korea in their shared aspiration for freedom.

North Korea's current reunification policy is, at its core, a redefinition of reunification as a coercive scenario—achievable only on Pyongyang's conditions, and increasingly backed by military and nuclear force. The United States must confront this new reality directly, and build a concrete strategy capable of both preventing North Korean coercive reunification and advancing the cause of a free and unified Korea.

The era of managing the threat through negotiation must give way to the era of resolving the threat through unification. That is the path that best serves the long-term interests of peace and freedom on the Korean Peninsula—and of American security.

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Greg Scarlatoiu

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North Korean Human Rights: Old and New Challenges

Since its inception three decades ago, the North Korean human rights movement has been facing some familiar challenges. Human rights in North Korea are often outcompeted by political, security, and military issues. Human rights in North Korea and the slow-motion North Korean holocaust are often outpaced by other humanitarian and human rights crises, in Ukraine, the Middle East, the Mediterranean Basin, or South Asia. At the State Department and foreign ministries around the world, there is bias against human rights, a tendency to relegate human rights to second or third-tier status. This bias begins in college, as diplomatic apprentices initiate their training in international relations. North Korean human rights defenders also suffer from a perennial lack of funding and resources.

Now we face a systemic challenge. The U.S.-dominated post-Cold War order included elements of realism, liberalism, institutionalism, and constructivism. Realism focuses on the projection of power. Liberalism concentrates on change from within, through work on human rights, humanitarian affairs, and information dissemination. Institutionalism centers on multilateral cooperation and dialogue, through the UN and other international organizations. Constructivism argues that global politics is shaped by socially constructed ideas, norms, and identities, not just material power.

In addressing North Korean human rights, governments, international organizations and NGOs have applied elements relating to all of these four theories of international relations: Realist, through extended deterrence and containment based on the U.S.-Republic of Korea (ROK) alliance; liberal, through civil society and like-minded governments addressing human rights and humanitarian issues; institutionalist, through UN and other international organization (IO) involvement; and constructivist, through cooperation among like-minded democracies, based on shared beliefs and values.

We are now witnessing a hard turn toward realism, even offensive realism. This is happening at the expense of liberal, institutionalist, and constructivist elements of the international order, which are rapidly evaporating. At this stage it is more than just lack of interest or having to compete against other issues that impedes the North Korean human rights movement. Civil society and human rights defenders are facing an increasingly steep systemic bias against human rights.

Human Rights and Peaceful Positive Change in North Korea

Despite ever mounting difficulties, enacting positive change in North Korea is still possible. To do that, the following components of a peaceful intervention are needed:

1. Since U.S., ROK or any other government or IO support is unavailable, secure funding from private sources.
2. In preparation for a global campaign, select and synthesize material reflecting North Korea's major human rights violations, from its vast system of unlawful imprisonment to the *songbun* system of social discrimination, and to the human rights-security nexus.
3. Highlight the success stories of young North Koreans living outside the country, some of them media influencers in their adopted new home, in order to highlight a new sense of North Korean escapee identity—youthful, vibrant, successful, forward-looking.
4. Launch a global campaign to highlight North Korea's crimes against humanity and other human rights violations as well as the human rights-security nexus.
5. Conduct information operations inside North Korea with the potential to empower the people through information, with the particular goal of creating a "revolutionary generation" among the younger population of that country.
6. Engage free North Koreans living outside the country in preparation for unification, through training and capacity building focused on tackling priority areas at the early stages of the future post-transformation period.

While unification of the homeland is of the utmost importance, unification must focus on people rather than territory. For good reasons, South Korean scholars have focused on the German precedent. The ensuing result has been excessive focus on the cost, rather than the benefits of unification.

A New North Korean Identity

Since the “Arduous March” of the 1990s, North Korean identity has been defined by stories of suffering, death, and survival. In recent years, young former North Korean social media influencers have been shaping a new identity, memorializing the past while expressing hope and determination for the future. For perfectly good reasons, the story of North Korean escapees has been one of tragedy, loss, and victimization. That narrative has increased awareness of North Korean human rights violations. It has also exacerbated views that differences between the two Koreas are insurmountable.

An information campaign targeting the people of North Korea must remain focused on the tragic narrative of North Korean human rights. It must also highlight a new optimistic sense of identity developing among young free North Koreans living outside the country. It is essential to work with the most effective North Korean social media influencers to examine the newly emerging North Korean identity and the ways it could be presented to inform both global audiences and the people of North Korea.

The “Arduous March” is deeply etched as a period of profound suffering among North Koreans, and the new identity for young North Koreans is being forged within this historical backdrop. Young North Korean influencers focus on resilience and remembrance. They have not forgotten this tragic chapter of their history. Instead, they have used it as a foundation for building narratives of strength and survival. They embrace their resilience and are steering their identity toward a future of hope and self-determination. There has been a visible shift in narrative from one of scarcity and endurance to empowerment and advocacy. They have found empowerment through expression. They aim to educate and engage a global audience through their social media presence.

The identity of young North Korean escapees today is centered on cultural synthesis and global integration. Having endured the Arduous March and resettled in their new homes in South Korea, the United States, and other countries, they embody an identity that respects its origins yet is globally integrated. This identity is informed by the lessons of resilience and the opportunities of a connected world. Personal insights enable young former North Korean influencers to develop a forward-looking identity. These young North Koreans are no longer solely witnesses to the past, but are also active participants in shaping a new, empowered identity that looks to the future with resolve and optimism.

The next generation of thought leaders and trend-setters in the North Korean escapee community brings deep personal perspectives on evolving identities. The most prominent ones seek to connect with diverse audiences and impact them by sharing stories of resilience and triumph. No longer confined to the geographical and political boundaries of North Korea, these young influencers establish their identity beyond borders, an identity that honors their origins while celebrating the freedoms and personal growth they have discovered in their new homes. They challenge perceptions, transcending the important but narrow lens of escape from oppression. They can shape perceptions of North Korea in the global consciousness and redefine what it means to be a North Korean in the 21st century.

The exploration of this digital identity transformation has potential implications for cultural understanding, diplomacy, and the personal growth of individuals who have left North Korea. The global discourse on North Korean escapees must shift to include multifaceted representations that celebrate their complexities. By examining the intersection of personal history, cultural adaptation, and digital expression, one can present a compelling case to North and South Korean audiences, while compelling global audiences to listen, learn, and contribute to that discourse.

The 1990 German reunification is surely a precedent of the utmost value. Other precedents, including the German unification of 1871, grounded in Otto von Bismarck's pragmatic *realpolitik*, must be examined. Most importantly, one must remember the enlightened European revolutionary generations that accomplished the Italian unification, the *Risorgimento* (1861-1871) and the Western-educated generation of young 1848 Romanian revolutionaries who accomplished the unification of two of the Romanian principalities (Wallachia and Moldova), creating the Kingdom of Romania in the process.

What North Korea needs is an enlightened "revolutionary" generation, aware of the outside world, the corruption of the Kim family regime, and the abysmal human rights situation. Awareness will be only the first step. The capacity to organize despite draconian coercion, control, surveillance, and punishment will be of the essence. And so will be the courage to enact change. Contraband K-culture provides entertainment and a window on North Korea. But K-pop does not create revolutionaries. Information campaigns must be cognizant of that aspect, and concentrate on enhancing awareness, capacity to organize, and the courage to act within the younger generations of North Koreans.

All countries change after unification. The only unification one can envision is under a free, democratic, prosperous, capitalist Republic of Korea. And there is no doubt that the sense of Korean identity will change, as it did in Germany in 1871, in Italy in 1861-1871, and in Romania in 1859 and 1918. To ensure a balanced, stable transition to a new sense of unified national identity, compliance with fundamental human rights principles will be of the essence.

Michael Marshall

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How North Korea Views Its Core Interests

Thirty plus years of U.S. efforts to denuclearize North Korea have failed to achieve their goal. Worse, they have resulted in a more nuclear capable North Korea with an increasingly diversified, and survivable, array of delivery systems. Clearly, the time has come for a radical reassessment and reset in policy towards the North Korean nuclear threat.

One of the major reasons the pursuit of denuclearization failed, was the lack of understanding of how North Korea's leadership viewed their own core interests. Central to the Kim family regime's survival strategy is the possession of nuclear weapons, and totalitarian control over their population. The Democratic People's Republic of Korea (DPRK) does, indeed, have a constitution. It is not one that guarantees any rights for its citizens.

Drawing the Right Conclusions

Any effective new policy approach must recognize this reality. It must also recognize that the Kim regime strategy is ultimately unsustainable. The recently published book, *Privileged but Powerless*, by Jieun Baek, documents the grievances of the North Korean elites: those who run the system, get to live in Pyongyang, enjoy a variety of benefits, but know that an inadvertent misstep could lead to their execution or imprisonment – and that of their family members.

A system where ideological commitment has been replaced by fear, and where expressions of loyalty are a survival strategy, cannot endure indefinitely. Change will occur, even though we cannot predict when or exactly how. Consequently, preparing for internal change inside North Korea is a critical national security requirement.

The Starting Point: Solid Joint Security

The policy paper, "Towards a Free and Unified Korea," is forward-looking, with its emphasis on human rights and access to information as steps advancing towards eventual unification. But the pursuit of these policies must rest upon a solid security base.

The paper calls for a robust regime of containment and deterrence. It urges strengthening U.S.-Republic of Korea (ROK)-Japan cooperation towards that end and building upon the 2023 Camp David Accords. It envisages continued contingency planning among the three partners for the potential crises that will emerge in the North.

The Role of Civil Society

The nature of Kim Jong Un's strategic worldview makes the prospect of any progress through relying solely on intergovernmental exchanges slim indeed. What he wants the United States and its allies are not ready to give, and what they want, denuclearization, he is not ready to give. Negotiating a compromise is clearly not in Kim's playbook.

A comprehensive strategy for dealing with North Korea calls for a broader approach and fresh thinking. That is why human rights and information access for the North Korean people are key pillars of the policy paper's proposals.

Essential to this approach are initiatives pursued by civil society groups such as the coalition, Action for Korea United. These should operate on their own track, independent of government, but government should recognize their value. They can raise issues and mobilize public opinion in ways governments cannot.

How do such groups work? First, they emphasize the human dimension of Korea's division. They make the issue the lives and fortunes of 26 million Koreans in the North rather than thinking the Kim regime *is* North Korea.

They promote solidarity with the people in the North, among South Koreans, the Korean diaspora, and friends of Korea worldwide. They are working in South Korea to revive a sense of national identity and purpose rooted in Korea's history. *Hongikingan*, "living for the greater benefit of all humanity," is the iconic expression of Korean national purpose, the heart that has run like a thread through centuries of its history. Today it can serve as a guiding ideal for reuniting a divided people.

Lessons from the Korean Independence Movement

The initial step is to establish a foundation of historical, moral, and political principles for unification, among South Koreans. A clear narrative account of Korea's identity and unfinished history from the early 20th century must be established.

Today, the narrative in the South, like the country as a whole, is divided. The left looks to the historic Sam Il Independence movement, launched on March 1, 1919, against Japanese colonial rule, as the true birth of the Korean nation. Korean conservatives react by saying, "No, Korea was born with the establishment of the Republic of Korea in 1948."

Of course, that date marks the birth of an officially, politically divided Korea, as the DPRK formally established itself the same year. Narrative is important in generating public understanding and support. The 1919 Independence movement should be viewed as the birth moment of the modern Korean nation, at least in principle, even though that aspiration remains to be fulfilled.

It should not be co-opted by one political faction but should represent the hopes for a unified Korean people and nation. The Independence movement was not a socialist movement. It was a movement of remarkable unity, restraint, and spiritual idealism translated into political aspiration. The 33 signatories of the Korean Declaration of Independence represented various Christian denominations, Buddhism, and Chondogyo, a native Korean spiritual tradition.

Their aspirations should empower the contemporary civil society movement for reuniting the Korean people to the point where these ideals and their implementation are taught in Korean schools.

Conclusion: Reclaiming Agency

This paper looks beyond policies limited to situational management. It sets out a long-term goal that aligns with the principles that underlie liberal democracies. Up until now U.S. and ROK policy toward North Korea has been largely reactive. Three generations of Kim's have called the tune. "Towards a Free and Unified Korea" places agency and initiative in the hands of the United States and its democratic allies.



PROCEEDINGS

ASSESSING U.S. NUCLEAR REQUIREMENTS FOR DETERRENCE

The remarks below were delivered at a symposium on “Assessing U.S. Nuclear Requirements for Deterrence” hosted by the National Institute for Public Policy on June 17, 2026. The symposium highlighted the bipartisan conclusions and recommendations regarding U.S. nuclear posture expressed in a joint article by five former senior officials responsible for U.S. nuclear policy in successive Democratic and Republican administrations. The symposium highlighted a recent Information Series article that considered the implications for extended deterrence of U.S. nuclear policy decisions.

David J. Trachtenberg (moderator)

David J. Trachtenberg is Senior Scholar at the National Institute for Public Policy and previously served as Deputy Under Secretary of Defense for Policy.

I would like to offer some introductory comments and context in an effort to set the table for today’s discussion.

First, I think it’s worth highlighting that in today’s politically polarized environment, it’s rare to find bipartisan agreement on almost anything, especially when it comes to nuclear weapons and nuclear policy. So, to have senior level nuclear policy officials who served in the Clinton, Bush, Obama, Trump, and Biden Administrations agree on fundamental principles of U.S. nuclear strategy is powerful and its impact should not be discounted. I commend our panelists for putting forth a cogent analysis of the need for the United States to possess a nuclear deterrent force that is adaptable to the dynamic and uncertain strategic environment we face today.

Second, they note several principles, which should serve as “guideposts” that the Trump Administration should keep in mind as it assesses what to do about U.S. nuclear posture. These include avoiding “mirror imaging”; basing any modifications to long-standing U.S. deterrence policy on facts and articulating a “truly compelling rationale”; procuring a nuclear force sufficient to effectively implement U.S. deterrence strategy; and deploying additional regional force capabilities to credibly convince adversaries that nuclear coercion or nuclear attack would be fruitless.

On the latter point, they argue that U.S. theater deterrence forces should be flexible, diverse, and sufficiently numerous to deter regional nuclear strikes, but without the need to match the nuclear force levels of either Russia or China separately or together.

Third, they note that a decline in the credibility of the U.S. extended nuclear deterrent may lead allies to consider acquiring their own nuclear weapons for security—a point also addressed by Keith Payne in his recent *Information Series* article.

Fourth, they cite the lessons of history to note that without such a realistic nuclear force posture, meaningful arms control is unlikely.

Fifth, they note that the Pentagon is currently conducting a “close-hold mini review of U.S. nuclear strategy” and conclude that such a review must provide the president with “the



widest possible range of options” necessary to deter adversary aggression—regardless of what Pentagon strategists may believe is appropriate or inappropriate.

Finally, as the Soviets might say, it is no accident, comrade, that many of the principles embedded in the joint article align nicely with the bipartisan conclusions and recommendations of the congressional Strategic Posture Commission, which did a remarkable job forging a truly bipartisan consensus on this important issue.

Now, of course even though there is a remarkable bipartisan consistency to the conclusions and recommendations proposed by our panelists, there are some nuances that may deserve additional explanation or clarification. For example, they propose “finding ways to promote strategic stability” with Russia and China, without defining what strategic stability is or considering that Moscow and Beijing may have their own views of strategic stability that are diametrically at odds with ours. Indeed, one could argue (as I have) that both Russia and China are interested in undermining strategic stability as we define it as part of their efforts to overturn the existing U.S.-led world order and create a new world order more favorable to their own interests.

Moreover, according to a recent article by the former chief negotiator of the New START Treaty, strategic stability is characterized by the ability to threaten “nuclear retribution,”¹ which seems a bit like the old Mutual Assured Destruction theory. But our panelists have noted that some allies believe extended deterrence may be weakened unless we “immunize” the U.S. homeland from such threats. Perhaps the “strategic stability” point can be clarified during the discussion period.

Now, with this backdrop, the issue of how best to posture U.S. nuclear forces in order to ensure the continued effective functioning of deterrence is the subject of today’s discussion. While it is not at all certain that the results of the ongoing review of U.S. nuclear strategy will produce an outcome consistent with the urgency required, one can only hope that the powers that be take these bipartisan recommendations seriously and act accordingly.

* * * * *

Franklin C. Miller

Franklin C. Miller is former Special Assistant to the President, Senior Director for Defense Policy and Arms Control on the National Security Council staff, and Principal Deputy Assistant Secretary of Defense for Strategy and Threat Reduction.

I appreciate the opportunity to share some brief thoughts on this important issue. Our joint article does parallel some of the conclusions and recommendations of the Strategic Posture Commission, which Madelyn chaired and on which I was honored to serve.

¹ Rose Gottemoeller, “The Strange Defeat of Nuclear Deterrence And the Coming Crisis in Strategic Stability,” *Foreign Affairs*, July/August 2026, https://www.foreignaffairs.com/ukraine/strange-defeat-nuclear-deterrence-rose-gottemoeller?mc_cid=b100ff9ba4&mc_eid=46ef2d16d1#.

The Commission's report provided a general view of what U.S. deterrence policy should be and where it should be going. It acknowledged that the United States now faces not one but two major nuclear adversaries that need to be deterred simultaneously and that our deterrent must also guard against the prospect of opportunistic aggression whereby an adversary in one theater seeks to take advantage of a breakdown of deterrence in another theater.

This is not a major change from the policy expressed in the first Trump Administration's 2018 *Nuclear Posture Review* (NPR); therefore, I don't believe it's necessary for the current Trump Administration to issue another full-blown NPR now, which would be time-consuming and provide little value added. That said, every administration should review existing nuclear policy and derive its own judgments about what requirements are necessary for deterrence based on changes in the international strategic environment. Indeed, Madelyn and I recommended this, and it appears the administration is now engaged in its own mini review of U.S. nuclear policy.

Our joint article represents the views of a bipartisan group of experts with decades-long experience in undertaking Pentagon nuclear policy reviews. Our experience spans multiple Republican and Democratic administrations, and I think reflects a prudent approach to U.S. nuclear policy if the United States is serious about maintaining an effective nuclear deterrent.

There are a number of key elements that the administration's nuclear review should consider, so let me mention a few. First, it's important to include all the key players. This includes those within the Office of the Secretary of Defense, the Joint Staff, USSTRATCOM, and NNSA. The views of the key players should be well vetted, and the administration should cast a wide net to solicit expert views. Engaging all the appropriate stakeholders on the front end will help ensure buy-in on the back end.

Importantly, the administration should not engage in "mirror-imaging," which assumes that adversaries will necessarily be deterred by what would deter us. Indeed, our view of what constitutes "rational" behavior in the nuclear sphere may be fundamentally different than the views of opponents whose goals and objectives may be strikingly at odds from ours. In fact, for deterrence to function effectively, the United States must be able to hold at risk those assets which an adversary values most; therefore, we must be able to answer the question, "what does the enemy leadership value most?" Without a thorough consideration of this issue, it will be difficult to have confidence in the credibility of the U.S. nuclear deterrent force.

In addition, as our joint article notes, any major change to U.S. nuclear policy must be based on a compelling rationale and must be defensible publicly. The American people must be told clearly and logically what is changing and why. Without such a clear explanation, public and congressional support for any major changes will be lacking. Beyond this, it is absolutely critical that any changes to U.S. force structure must clearly and visibly support U.S. nuclear strategy. If called upon, our forces must be capable of executing the strategy. Any disconnect between U.S. nuclear strategy and the force levels needed to implement the strategy will likely be seen by friends and foes alike as a lack of American will and may actually encourage adversary aggression or nuclear coercion rather than deter it.

A credible and effective nuclear strategy must present the president with the widest range of possible options to deter a spectrum of potential adversary actions. Our enemies may not feel similarly constrained in their exercise of nuclear or conventional threats and may seek to exploit perceived advantages at various levels of potential conflict. Such a situation would undermine rather than reinforce deterrence.

Finally, let me mention a few areas of concern regarding the ongoing mini review of U.S. nuclear strategy:

- First, there are disturbing indications that not all the necessary players are involved in the strategy review process. This does not bode well for a positive outcome that is supported by all communities of interest.
- Second, rumors of possible additional cuts to U.S. conventional deployments in Europe are likely to undermine the credibility of U.S. extended deterrence and create potential proliferation problems as allies seek alternative means to ensure their own security.
- Third, evidence is lacking that the recommendations of the Strategic Posture Commission are being seriously considered or acted upon. For example, the Commission's urgent recommendation involving the upload of nuclear warheads on existing platforms seems to have fallen on deaf ears.
- Fourth, test flight delays and cancellations of the Army's Dark Eagle hypersonic program along with cancellation of plans to deploy Tomahawk cruise missiles to Germany—a deployment decision supported by NATO in 2024—further strain the credibility of the U.S. extended deterrent.
- Finally, official statements from senior U.S. policy makers cast doubt on the assumption that the administration plans to take the steps necessary to strengthen the efficacy and credibility of the overall U.S. nuclear posture. A failure to do so would have significant, long-term, negative repercussions.

In conclusion, we will see what the ongoing mini review of U.S. nuclear strategy produces. I hope its results will invalidate my concerns and make U.S. nuclear posture sufficiently robust, so the efficacy of our deterrent is preserved as the threats to U.S. national security interests grow.

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Keith B. Payne*

Keith B. Payne is President and co-founder of the National Institute for Public Policy and former Deputy Assistant Secretary of Defense for Forces Policy.

Alliances can be both risky commitment traps and enormous advantages. There is no enduring objective answer to the question of whether the benefits of alliances outweigh the risks and costs because the answer depends on the prevailing security context.

The conclusion that alliances are a net benefit has dominated U.S. national security policy since the end of World War II. However, the U.S. post-war system of alliances is now confronting a crisis of confidence that follows from four interrelated developments that have emerged over the course of the past three decades:

- First, was Washington's badly mistaken, post-Cold War expectation of a cooperative "new world order," and America's related generation-long "holiday from history." The late Alan Greenspan's 1996 description of America's "irrational exuberance" of the dot-com "bubble" fully applies to Washington's simultaneous embrace of a "new world order." Only doughty realists warned that a new cooperative world order was a pipe dream.
- Second, are the aggressive geopolitical agendas of Russia, China, North Korea, and Iran, their threats, increasing cooperation, and expansive nuclear and conventional forces aspirations. These want to change the world order in their image and are arming to do so.
- Third, are Washington's excessively blunt expressions of dissatisfaction with allies' contributions to collective security and the costs and risks of being their ultimate security provider. These have continued even after NATO members agreed to much higher levels of defense spending.
- Fourth, are the allies' generally inadequate investments in their own defense and their corresponding deep concern with America's apparent rejection of its past "ironclad" commitments to their security.

In 2011, then-Defense Secretary Robert Gates anticipated this situation when he warned: "...if current trends in the decline of European defense capabilities are not halted and reversed, future U.S. political leaders—those for whom the Cold War was not the formative experience that it was for me—may not consider the return on America's investment in NATO worth the cost." We appear to be there.

The convergence of these four interrelated factors has had profound consequences. For example, it has led foes to increased investment in nuclear weapons, and friends to increasing interest in their own national nuclear capabilities or a new multinational nuclear

* These comments are adapted from "A Fading Western Alliance System? Who Is to Blame and Why Should We Care," *Information Series*, No. 662 (Fairfax, VA: National Institute Press, June 8, 2026), https://nipp.org/information_series/keith-b-payne-a-fading-western-alliance-system-who-is-to-blame-and-why-should-we-care-no-662-june-8-2026/).

capability independent of Washington. This interest is evident in Germany, Poland, Turkey, Japan, and South Korea. We could as a result see a cascade of proliferation.

This contemporary nuclear emphasis by foes and friends has come as a surprise to many in Washington who wrongly presumed that, with the coming happy “new world order,” the need for nuclear deterrence and weapons was ending. The reality now unfortunately is opposite that naive expectation.

The foreboding future combination of deeply frayed U.S. alliances, expansive nuclear proliferation, and unprecedented threats is not far-fetched given the contemporary trajectory of history.

It is convenient to blame the West’s current security dilemma on “free-riding” allies, and they certainly engaged in the same credulous post-Cold War thinking that captured Washington. They happily relied on Washington’s grudging willingness to pay heavily for their defense and thereby freed up their own resources for more socially pleasing purposes.

However, Washington also carries considerable culpability for its self-serving imagining of a cooperative new world order—which it adopted with what one clear-eyed academic rightly described as an “ideological certitude bordering on geostrategic arrogance.”²

Secretary of State John Kerry misinformed us that, in the 21st century, great powers just wouldn’t invade their neighbors. This type of fanciful imagining drove America’s premature elimination of key military capabilities, and naive arms control enthusiasms. For example, President George H. W. Bush unilaterally nearly eliminated U.S. theater nuclear weapons. These follies were not foisted on us by allies; they were of Washington’s own bipartisan making.

Following the Cold War, both allies and Washington foolishly proceeded to enjoy a prolonged “peace dividend,” and failed to hedge realistically against the current harsh threat reality—based on wishful, self-serving thinking.

Acknowledging the shared culpability for the West’s current security dilemma is of some value because it suggests where change is needed. The most important question now, however, is how can the West best respond to the real, growing threat presented by the “axis of autocracies”?

A united West fully committed to collective security surely is needed to meet this emerging existential threat. Indeed, the incomparable potential combined strength of a united West is the only barrier to the aggressive aspirations of Russia, China, Iran, and North Korea. They will not moderate themselves; continued Western infighting will instead encourage their aggressive agendas.

A new direction toward greater Western unity and collective power will likely demand at least the increase in defense spending agreed to by NATO, and a common willingness to set aside tit-for-tat reproaches that poison the atmosphere. Continuing intra-alliance griping and sniping would be passé were it not for the fact that we face common threats that now

² Andrew A. Michta, “The Next U.S. National Security Strategy Risks Misreading History Again,” *RealClear Defense*, September 22, 2025, https://www.realcleardefense.com/articles/2025/09/22/the_next_us_national_security_strategy_risks_misreading_history_again_1136169.html.

demand Herculean joint efforts. Germany, as the potentially most powerful continental ally, has a special responsibility to focus on the realities of countering real military threats—which it appears to have recognized very recently with its first-ever published military strategy.

In conclusion, the contemporary reality is far from President Bush's supposed "new world order"—which was a profound misreading of history with truly harmful consequences. But both sides of the Atlantic have contributed to the West's contemporary problematic capability to counter emerging existential threats and also to the desperate need to mend internal alliance fissures.

The tendency in some American political circles to blame allies alone for NATO's current security dilemma is as historically ungrounded as is the popular European sport of blaming Trump alone. This type of finger pointing is harmful and ignores history. The fault has been two-sided, and the recovery must be two-sided.

If adapted to meet the unprecedented threats of the 21st century, NATO will have continuing great net value for the United States and allies. If not, the West's collective security system could collapse—to the great satisfaction and further animation of a consortium of extremely hostile autocratic powers. The choice is now before us. As Benjamin Franklin said at the signing of the Declaration of Independence in 1776: "We must all hang together, or most assuredly we shall all hang separately."

Gregory Weaver

Gregory Weaver is former Deputy Director for Strategic Stability on the Joint Chiefs of Staff Directorate for Strategic Plans and Policy (J5).

Thanks for asking me to participate today.

First, let me say that the article is one of the best indications yet of the emerging bipartisan consensus on what constitutes an appropriate U.S. nuclear strategy for the future, and the U.S. nuclear force necessary to implement that strategy effectively. Like the congressional Strategic Posture Commission report, it makes clear why emerging threats require continuity in nuclear strategy, and augmentation of our nuclear forces as we modernize them.

I applaud the authors for their clear, concise set of recommendations for those conducting the administration's review. If the review underway follows the advice given in the article, we'll be fine. But I'm concerned that it won't follow this advice.

In my brief comments, I want to focus on one point of related advice I would have added, and then quickly address the potential consequences of the administration's review.

First, the article does an excellent job of making clear that U.S. nuclear strategy must be tightly linked to the rest of U.S. military and national security strategy for all three to be effective in preventing war with nuclear-armed adversaries, and winning such a war without the catastrophe of uncontrolled nuclear escalation. But it did leave out discussion of one of

the key findings of the congressional Strategic Posture Commission: that in a two nuclear peer threat environment the United States must consider once again relying on nuclear weapons to compensate for conventional inferiority in theater wars with nuclear peers if the United States and its allies are unable, or unwilling, to maintain conventional superiority in two theaters simultaneously.

The Trump Administration has taken multiple actions that have raised doubts about our willingness to come to the conventional defense of our NATO allies, and recent reports indicate a significant reduction in the size of the conventional U.S. military forces committed to NATO—reductions apparently made without careful consultations with our European allies about their scope and timing.

These actions indicate that this administration's strategy is not likely rooted in collaboratively maintaining conventional superiority in two theaters simultaneously. They seem willing to risk that the European NATO allies will not effectively rearm sufficiently, or sufficiently quickly, to maintain NATO conventional superiority, and I've seen no indications that they intend to work closely with those allies to enable them to do so.

Despite this risk, the administration has stated that the United States will continue to extend nuclear deterrence to NATO. Yet the administration's actions arguably undermine the credibility of our extended deterrent pledge to NATO. Why would the Russian leadership believe we would be willing to fight a nuclear war to defend NATO if we are unwilling to commit large conventional forces to do so?

The administration's actions also show no sign that it recognizes the potential need to compensate for conventional inferiority in Europe. Thus, the nuclear review risks failing to build the theater nuclear forces necessary to compensate for conventional inferiority, while the broader *National Defense Strategy* is arguably creating the very conditions in Europe that would make such theater nuclear forces necessary.

A theater nuclear force capable of credibly and effectively compensating for conventional inferiority would need to be significantly larger and more diverse than the augmented theater nuclear force required to simultaneously deter or counter Russian and Chinese limited nuclear escalation under conditions of U.S./Allied conventional superiority.

If the review fails to address this mismatch, it will produce a strategy that increases the likelihood of a war with Russia and the risk that such a war will involve nuclear escalation that creates an existential threat to the United States.

Finally, let me say that I'm concerned the ongoing review will make another dire mistake which would be avoided if they follow the recommendations in the article. They may conclude that maintaining the ability to limit damage by fielding nuclear forces capable of comprehensive counterforce operations against the nuclear forces of both Russia and China is both unnecessary and too costly. They would be wrong on both accounts.

Abandoning comprehensive counterforce capability would be a drastic change in the U.S. nuclear strategy that has arguably prevented nuclear war for over 80 years despite intense military competition with dangerous adversaries. U.S. counterforce capability enhances deterrence of both conventional aggression and nuclear escalation by casting a long shadow over an adversary's calculus regarding going to war with the United States and its allies, and

regarding escalating to the use of nuclear weapons in such a war. Such counterforce capability instills additional caution in those calculations that would not exist without it.

How does it have this effect? Providing the U.S. president a capability *in extremis* to reduce the damage the United States would sustain in a large-scale nuclear exchange does three key things:

- First, it makes U.S. persistence in the face of conventional aggression and limited nuclear escalation more likely. That enhances extended deterrence of both.
- Second, it arguably creates a firebreak between large-scale counterforce strikes and the large-scale countervalue strikes that pose an existential threat to the nation.
- Third, it provides a means of actually limiting the damage done to the United States should deterrence fail. Whether such damage limitation is “meaningful” is in the eye of the beholder. But this beholder believes that reducing the damage done to the United States by at least an order of magnitude is indeed meaningful, even if the outcome is still horrific to contemplate.

The bottom line is the strategic impact of having the option to limit the damage an adversary can do is not dependent on the views of anyone engaged in this debate in the United States. Rather, it is dependent on whether adversary leaders might believe that, *in extremis*, the president of the United States may perceive the difference in damage the United States will incur between striking first and striking second as “meaningful” to him or her, and to the American people.

They would be wrong about the cost of maintaining such a capability as well. The existing U.S. strategic nuclear force could meet this requirement simply through uploading non-deployed warheads on existing strategic delivery systems. That is not expensive. The future strategic force would require more delivery systems than are currently planned in the modernization Program of Record—but not drastically more.

The combination of an uploaded Sentinel ICBM force, a moderately expanded Columbia SSBN force (3-4 boats), and a larger B21 force (already being considered for conventional purposes) would likely meet the requirement. That is a relatively modest increase in cost, but as Defense Secretary Mattis said, “America can afford survival.”

In conclusion, the nuclear strategy the United States chooses to address the impending two nuclear-peer threat is one of the most momentous strategic choices the nation has faced. While correlation is not causation, there have been no major wars between nuclear-armed major powers since the advent of nuclear weapons, no global conflagrations like the First and Second World Wars.

The very least that can be said about American nuclear strategy is that it has not failed to deter attacks on the United States and its allies by a nuclear-armed major power since the advent of nuclear weapons in 1945. A decision to abandon one of the core tenets of that American nuclear strategy, comprehensive counterforce targeting for deterrence, assurance, escalation management, and damage limitation, would constitute a high-risk choice in the face of two nuclear peer adversaries who will have large-scale nuclear counterforce capabilities of their own. There is no sufficient reason to take this gamble.

Thanks for letting me comment on the article, and thanks again to the authors for putting it out there.

Kyle Balzer

Kyle Balzer is a fellow at the American Enterprise Institute.

Thank you, David. And thank you to the National Institute for inviting me. It's a real pleasure to speak alongside this distinguished group of panelists. To my mind, they have written an important and obviously timely piece—and I hope those working the issue take their suggestions and run with them.

As I suspected, the panelists have given us a lot to think about. So, I want to keep my comments brief and focus on three aspects of their recent piece that are too often overlooked in public discussions.

The first is that whatever comes out of the reported nuclear review, any changes in policy should be communicated clearly to not just the American public, but to our allies and adversaries. The rumors about the review have generated a great deal of interest, and maybe even some anxiety, in our allies. And as we learned the hard way in the neutron bomb crisis and Euromissile crisis in the late 1970s, poor communication could lead to a softening of alliance cohesion today, if not an outright existential crisis in transatlantic and transpacific relations.

I think the same goes for communicating clearly our deterrence to potential enemies. Beginning in the mid-1960s, U.S. defense officials spoke openly about building “strategic stability” with the Soviets. And they began to air in public their hope that such a relationship would be built on reciprocal nuclear restraint, or mutual assured vulnerability between the superpower homelands. This rhetoric only served to unnerve our NATO allies and embolden the Soviets.

It's worth remembering today that these errors in declaratory rhetoric were only partially mitigated in the mid-1970s when defense officials devoted significant time to public messaging. They began speaking openly about more credible nuclear options below the threshold of large-scale nuclear attack. They declared in public that they would build a heavier ICBM, and they explained to ally and adversary alike that this would help the United States adjust to changes in the nuclear threat environment. And as we now know, all of these pronouncements complicated Soviet defense planning and had a positive deterrence effect.

This, of course, isn't to say that U.S. officials were perfect in the second half of the Cold War. I've already mentioned the neutron bomb crisis in 1977-78. But U.S. officials certainly came to recognize that deterring and assuring is more than just hardware alone; sound declaratory policy and consistent messaging from public officials are a prerequisite for deterrence and assurance. So, I'm glad the panelists raised this important point in their piece, just as talk of “strategic stability” has become a focal point in the Trump Administration's public messaging.

The second point I want to emphasize is the negative consequences that would flow from a failure to upload warheads on ICBMs and SLBMs. Those new Chinese silos place pressure on our targeting coverage. Those silos are highly valued by the Chinese leadership. And by holding those silos at risk, as the panelists suggest, the United States can limit damage to the homeland—which is of utmost importance to our allies. In my engagement with allies, they are acutely aware that our ability to limit damage to the continental United States makes our theater nuclear options credible. So, our allies are watching closely to see if we upload, and a failure to follow through would demonstrate a clear lack of national will on our part.

The panelists referenced the 1983 Scowcroft Commission in their piece. And on the subject of national will, that Commission—on a bipartisan basis, people like Harold Brown and James Schlesinger—recognized how nuclear modernization was an expression of our national resolve to which adversaries paid close attention. In fact, concerns about Soviet perceptions of America's national will were among the main reasons the Commission recommended deploying the MX ICBM. The Commissioners insisted that canceling the MX, foregoing improvements in damage-limitation capability, would signal to the Soviets that we are not serious about deterrence.

So, with that in mind, one doesn't have to guess what we'd be communicating to the Chinese if we decided to forego uploads on our ICBM fleet. Beijing has made major investments in heavier ICBMs, and a U.S. failure to make just marginal investments in our ICBM fleet by uploading would send the wrong signal.

My final point concerns the panel's emphasis on theater nuclear forces and our paucity of theater options relative to Russia and China. I believe that rightsizing the theater nuclear imbalance in Europe and East Asia is our most pressing challenge when it comes to nuclear deterrence. And, in my judgement, our dearth of theater options has already opened up space that Beijing is exploiting by pressuring our allies in the gray zone, nearly every single day. The U.S. alliance system is America's greatest competitive advantage. Our adversaries have nothing like it, and they therefore aim to break our global alliance system through nuclear-backed coercion. Allies have taken notice and some of them—especially in Europe—openly question the U.S. nuclear security guarantee.

There was a recent piece in *War on the Rocks* that rejected the whole idea of a deterrence gap in Europe and East Asia. But this assertion was made without any reference to the perceptions of our allies, who don't reject the concept. Quite the opposite. In East Asia, especially, they have identified one in the theater nuclear balance, and they believe that the SLCM-N would help close it and recouple U.S. strategic forces to the region. We need not "scour" the strategic environment in search of deterrence gaps. We need only to listen to what our allies say and what our adversaries do.

To shore up our global alliance system, we should get serious about accelerating SLCM-N. Moreover, we should think seriously about a ground-launched missile that could be deployed in Guam and Europe.

I'll end my comments here and turn it back over to David. Thank you.



GERMANY'S NEW MILITARY STRATEGY AND ITS IMPLICATIONS

The remarks below were delivered at a symposium on “Germany’s New Military Strategy and Its Implications” hosted by the National Institute for Public Policy on July 20, 2026. The symposium highlighted the German government’s new military strategy, titled, “Responsibility for Europe,” and its implications for NATO and extended deterrence. The new strategy reflects a historic shift in Germany’s post-war role, proposing that Germany become “the strongest conventional army in Europe” by 2039 and take the lead in providing conventional military forces as a deterrent to aggression on the continent. It also proposes growth in the size of the Bundeswehr, a more efficient defense procurement process, and a greater focus on territorial defense.

David J. Trachtenberg (moderator)

David J. Trachtenberg is Senior Scholar at the National Institute for Public Policy and previously served as Deputy Under Secretary of Defense for Policy.

We have a terrific and truly unique panel of subject matter experts today, who bring a German perspective to this discussion. The recently published unclassified German military strategy, titled, *Responsibility for Europe*, is, as the document states, “the publicly accessible part of the first Bundeswehr Military Strategy and the resulting Plan for the Armed Forces, both approved by the Chief of Defence in April 2026.”¹ But before turning to our panelists, I would like to offer some introductory comments and context in an effort to set the table for today’s discussion.

First, this new German military strategy is an historic break from Germany’s previous approach to military affairs. As the document notes, this is “the first Military Strategy in the history of the Federal Republic of Germany.” It describes the threats, sets priorities, explains how the Bundeswehr will prepare to deter conflicts, and fight if deterrence fails.

It outlines a path for turning the Bundeswehr into “the strongest conventional army in Europe,” enhancing its military capability and establishing “technological superiority.” It is both a strategy and a military capabilities plan, combining both into a single document.

With respect to the threat picture, the document asserts that “Russia is likely to remain the greatest threat to our security,” noting ominously that “Russia is creating the conditions for a military attack on NATO countries” and that Moscow “considers the use of military force as a legitimate instrument to enforce its interests.” It also highlights Russia’s use of sabotage, cyber attacks, disinformation, and espionage.

Importantly, the strategy outlines an “expanded role” for the Bundeswehr, while the German Chief of Defense describes Germany’s intent to “assume a leading role within NATO” as a “paradigm shift.” Moreover, just last week, Franco-German cooperation on nuclear

¹ The full document is available at <https://www.bmvg.de/resource/blob/6093998/678875025812878cfa657f9801f62ffc/dl-gesamtkonzeption-der-verteidigung-eng-data.pdf>.

deterrence issues reached a new level with Germany's participation in an air refueling exercise and a decision by Germany to participate for the first time in a French nuclear exercise later this year, signaling increased cooperation between Paris and Berlin on nuclear deterrence issues and raising concerns that Germany may believe it can no longer rely primarily on the United States as the guarantor of its ultimate security.²

In addition, the strategy concludes that Germany "will systematically take on more conventional strategic responsibility for Europe"—an approach that seems to be in alignment with the Trump Administration's demand that Europeans take the lead in defending their own continent. Indeed, the strategy notes that the Trump Administration has shifted its strategic focus away from Europe and toward other theaters like the Western Hemisphere and the Indo-Pacific.

However, there is a fine line between insisting that others assume a greater burden for defending themselves and ensuring that so-called "ironclad" American security guarantees to allies are seen as credible. The issue of allied burden sharing has long been contentious. And President Trump's methodology for achieving a more equitable distribution of defense responsibilities has indeed ruffled many European feathers, but it has achieved notable results. The question is: at what cost to alliance unity and to the credibility of U.S. extended deterrent security guarantees?

Germany's new military strategy also raises several other important questions. For example:

- Will European states now turn increasingly inward and seek to defend themselves without significant American assistance?
- Will Europeans seek to develop a Euro-centric defense posture as a counter to the U.S.-dominated NATO structure?
- What might this mean for the future of NATO?
- Will Germany's drive for conventional military dominance on the continent be welcomed or shunned by its neighbors?
- Will Germany go nuclear?
- Will Germany accept reliance on UK and French nuclear forces as a substitute for the American nuclear umbrella?
- Are we witnessing the beginning of the end of U.S. extended deterrence?

² "Germany, France deepen nuclear deterrence cooperation," Deutsche Presse-Agentur, July 17, 2026, https://www.yahoo.com/news/politics/articles/germany-france-deepen-nuclear-deterrence-094147287.html?guccounter=1&guce_referrer=aHR0cHM6Ly93d3cuZ29vZ2xlLmNvbS8&guce_referrer_sig=AQAAAFQtX7Lk9_5vIUx_yF4oktPC5vbBW65KTPDkFJf070js04g_OS3nOAumCi_UXsvQnr-nSxcj3oALxZwhIM1BA_06yhQ6huoJrrx5DRg_4ZkNUKFSeemnPfvncgl97HqpZwXmoDvLZ2JjX9gmCkVcQGGXdt14UD7IVZz06KWEjsB7k; Chris Lunday, Laura Kayali, and Hans Von der Burchard, "German military to join French nuclear exercise for first time," *Politico*, July 16, 2026, <https://www.politico.eu/article/german-military-to-join-french-nuclear-exercise-for-first-time/>.

These are just some of the questions that I hope we will be able to consider in the course of this discussion. The implications of Germany's new military strategy for NATO and extended deterrence in Europe are, in my view, among the most significant issues to be discussed today.

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General (Ret.) Rainer Meyer zum Felde

General (Ret.) Rainer Meyer zum Felde is former Vice President of the German Federal Security Academy, German representative to the NATO Defence Policy and Planning Committee, and Head of Transatlantic Security in the MoD Planning Staff.

Let me focus my remarks on two questions: Where is there *continuity*, and what are the elements of *paradigm change*?

Will Germany stay firmly embedded in the West (or what is left from the concept of the “West”) based on both common values and interests? Yes, clearly yes. Despite nationalistic populists also in Germany, both from the extreme left and extreme right—there is no doubt that the broad majority of Germans will vote for democratic parties which hold the traditional course: NATO for security, EU for prosperity. For Germany to stay firmly embedded, of course these two key institutions must survive and not be destroyed by U.S. politics. If that happened, we Europeans would find ourselves back in the nightmare of the 19th century. This is clearly not what the Germans would want again—to be sandwiched in the centre of this old continent and surrounded by nation states which have been in permanent competition and struggles for dominance. Germany in the centre of Europe, and its historic predecessors have always been part of this unfortunate history, both as an actor or a victim of geopolitics.

After two world wars totally lost, there is no appetite for this perspective. Our core interests are: Sleep well, have a good life, and never be alone—NATO, EU, Alliance solidarity (as Professor Stürmer who died last week, a well known advisor to former Chancellor Hermut Kohl, simply put it). And let me add: We lost these two World Wars primarily against the USA once they intervened decisively with their overwhelming resources in 1917 and in 1943. And we won the Cold War against the Soviet Union primarily because of the Americans who stood from 1955 until 1990 side by side with our own forces in NATO's Forward Defence posture—and they were the only ones among our Western allies who fully supported the reunification of Germany. This historic context, in particular President Kennedy's visit to Berlin (“Ich bin ein Berliner”), President Ronald Reagan's “Mr. Gorbachev, tear down this wall,” as well as President Bush's and Secretary of State Baker's engagements for a united Germany in NATO in the “2-plus-4” negotiations are still deep in our minds. And this is the reason why the transatlantic bond is so very dear to us and NATO much more than an interests-driven business case.

Accordingly, the Military Strategy several times highlights that the *Bundeswehr will remain an Alliance army*, that it will follow primarily the NATO capability targets and the NATO Planning process overall as its jointly agreed guidelines for defence.

Now, turning to elements of *a paradigm change*:

What has fundamentally changed is, first, our threat perception: Russia, supported by China, North Korea, Iran and its proxies, *is a direct threat for our European security, and will be so for a long time*. Russia is no longer a strategic partner, or only a “potential” threat. We cannot continue with “generic” or “capability based, threat informed” defence planning. The Russian threat for European allies, beyond Ukraine, is real. The issue here is that *this assessment is no longer shared by the current U.S. administration* and no longer reflected in U.S. capstone documents. This has far-reaching consequences: *our strategic centre of gravity in the alliance, i.e., to maintain unity and resolve (as former SACEUR Breedlove put it in 2015), is broken*. And let’s face it: this is more the result of changed attitudes in Washington, which nobody had expected from the leading nation of the alliance, than an achievement of Russia’s diplomatic skills and military power. It is a *self-inflicted failure*, which needs to be repaired and with good will can be fixed.

The second element of a paradigm change is that our *German focus is now on collective defence*, 32 for 32, of the Baltic region and on cooperating with our North-Eastern allies: We are preparing for shoulder-on-shoulder forward defence together with Finland, Norway, Sweden, the Baltic States, Denmark and Poland. Such close cooperation with the so-called Northern Group has not been the case until 2018—in these years relations with Russia had higher priority for Berlin than playing a co-leading role together with the UK in defence of the Baltics or the High North.

The third element of change is that the core task of the Bundeswehr is now again, after two decades of crisis management, *deterrence and defence*. With that we return to the German Armed Forces’ constitutional mission—our Basic Law defines their purpose as: “Armed Forces for defence.” It is a return, because in the two decades from the mid-1990s to 2014 the focus was on international crisis management (i.e., “conflicts of choice”), not any longer on deterrence and defence as in the cold war (i.e., “war of necessity”). I recall that as a result of the U.S. and UK request and advice, we decided to get rid of our quite capable, heavy old Bundeswehr with its 12 divisions, 36 combat brigades and its “total defence” structure, transforming it to a light, agile, deployable, “out of area” posture in order to participate in crisis management abroad on the European periphery. Even in 2014, at the beginning of NATO adaptation, Berlin maintained the idea of two missions of equal importance: a slightly reconstituted Bundeswehr for deterrence and defence, but at the same ready for crisis management as the more likely mission. The latter continued to define the size, capabilities, structures, and processes until 2018.

The Military Strategy now, for the first time, clarifies our priorities: The first priority is on deterrence and defence (and now defines structures, size, and capabilities); the second is crisis management; and the third is on cooperation through partnerships—like in NATO’s Strategic Concept.

Another significant element of change is the *level of ambition*: It is several times clearly stated, that Germany must take on a new *strategic* role within NATO, as a consequence of the U.S. shift in focus to the Indo-Pacific and the U.S. request that the Europeans themselves be primarily responsible for their conventional defence. This U.S. view is accepted as a valid argument, and Germany is ready to take on that responsibility. However, we see it as a burden, not as an opportunity for dominance. We are still concerned about the possible misperception of this new role by our European allies in Paris, London, Warsaw, and Rome. So, the message is “handle with care,” and therefore it is highlighted that we need to develop our new role *jointly*, in a collegial manner. This touches on the old big question of leadership in Europe and how to practice it wisely. This will be a key issue, especially if Europe’s Pax Americana, based on undisputed U.S. leadership, should come to an end.

We must not forget that prior to the U.S. presence in Europe as a European power, we had a history of power struggles between rivals along ethnic, religious, cultural, economic, and nationalistic lines from the end of the Roman Empire until the end of World War II – 15 centuries of war rather than peace in Europe. Whether Europe will remain stable and peaceful without this Pax Americana, and without the presence of the United States as a European power, remains to be seen. Since 1945, the U.S. role in Europe has been more than just about protecting 500 million Europeans against 140 million Russians—it has kept Europe stable and at peace.

Germany’s answer at the level of Grand Strategy is to keep the United States in as long and as far as possible. To achieve this, we must become more European in order to maintain the transatlantic bond with the United States.

What is also a new element of paradigm change in this regard are some points which indicate a new thinking about an “emergency plan,” just in case developments go wrong. For example:

- On nuclear deterrence, we are beginning nuclear talks with President Macron of France, but at this stage, it cannot be more than an early symbolic activity (such as joint air-to air-refuelling of nuclear capable fighter aircraft last week).
- Furthermore, there is a sentence in the strategy about forming a coalition of the willing in case it is needed.
- And last but not least there is an unprecedented paragraph on a national capability to command and control German and allied forces in multidomain operations (should NATO be unable to act).

The most prominent element of paradigm shift is of course the outspoken intent to become *the strongest European army at the conventional level*, by the end of the 2030s. Over decades, the principle has been: “About equal with the Brits and the French,” regarding defence expenditures and, subsequently, forces and capabilities. *This ambition is now significantly different from the past*. From now on, we are spending more on defence than France and the UK together. In the years to come, this huge investment will consequently translate into modern forces and high-quality capabilities—hopefully. It will underpin Germany’s concept at the 2014 Wales summit, to offer itself as a NATO framework nation for

other allies. This was already an important step in the direction which is now described as Germany's new strategic role. However, despite all our efforts, we will not be able to substitute fully for the role of the United States—these are too big shoes to step into. At the strategic nuclear level, Germany desperately needs top cover vis-à-vis Russia and, sooner or later China. This means that while Germany can offer itself as a framework nation for others at the conventional level, it needs support from the United States in some areas, first and foremost—but not only—on nuclear deterrence.

In addition, the German approach to modern and future defence technology, innovation, defence economy, and quality versus mass, shows both continuity and change. We continue to rely upon superior technology and innovation, mostly driven by U.S. or—increasingly—Chinese enterprises such as AI, quantum computing, robotics, data driven digitalization, and space-based reconnaissance and command and control. Of course, we would love to become more sovereign and less dependent on U.S. companies, but in reality, European nations need access to U.S. advanced technologies. It is an important point.

Last but not least again on nuclear deterrence in Europe: *There is simply no credible substitute in Europe for the unique nuclear umbrella that the United States provides for its allies in Europe.* France may be sovereign, but it is neither willing nor in a position to credibly offer an “extended” deterrent for allies. The UK is also a nuclear power, but dependent on nuclear cooperation with the United States. Germany, like others, participates in the nuclear arrangements and primarily for this purpose, we have decided to buy American F-35s and maintain our contribution as a “non-nuclear nation.” We have no other choice—*no one wants the Germans to start looking for a national alternative in the nuclear dimension.*

Hence, whether we like President Trump's and Vice President Vance's views and the MAGA agenda or not—we *do need the transatlantic bond with the United States* and its continued presence as a European power, in essence for three reasons:

- the indispensable U.S. extended nuclear deterrent against Russian coercion;
- the U.S. role in balancing potentially competing European powers; and
- because of superior technologies and innovation in key areas of defence.

What is missing is a concept for total defence, including building resilience and civil defence, against Russia's hybrid warfare. And, also, a concept for scaling up defence industries in peacetime, crisis and war.

Personally, I would only disagree with the Military Strategy on one point: The intended size of 460,000 can only be preliminary. This is included in the wording “at least” 460,000. *I believe we need to go to the legal limits (set by the “2-plus-4” treaty), of 370,000 peacetime strength, and about 1 million in wartime.* This will of course require us to reactivate our well proven conscript system as in the 1980s when the Bundeswehr was at its peak performance. Otherwise, the message to Putin and our allies would be that Germany is not willing to go “all in”—not for supporting Ukraine, and not for collectively defending itself and allies.

To sum up: *This is a good first military strategy* at the second level below a national “grand strategy.” It is a big step forward for Germany. The best news is that this time, we have not only an agreed concept as NATO developed for the summits in 2014 and 2016 –but this time,

Berlin is willing to fully implement these decisions and has underpinned it with unprecedented financial resources.

With the implementation now underway, we can re-start thinking about the old offer by U.S. President George H.W. Bush in 1990 to become a “partner in leadership,” which Chancellor Helmut Kohl at that time could not accept. In the years to come, as far as peace and security in Europe are concerned, Germany may be able to be such a “partner in leadership” for the United States.

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Michael Rühle

Michael Rühle is former Head of the Climate and Energy Security Section at NATO.

The new German Military Strategy focuses on Germany’s conventional military ambitions. Only one sentence directly addresses nuclear matters: According to the document, the Bundeswehr “will continue to contribute to NATO’s nuclear deterrence within the scope of nuclear sharing.”³ That’s it.

This lack of detail was to be expected. As a non-nuclear country, Germany’s main contribution to NATO’s deterrence is, by definition, in the conventional realm. According to the Military Strategy, Germany aims to have Europe’s largest army by 2039. The enormous amount of money Germany has borrowed to boost its defense is intended to strengthen its conventional capabilities.

However, the situation for Germany is less straightforward when it comes to nuclear deterrence. There is no doubt that the U.S.-centric option of extended nuclear deterrence and nuclear sharing remains Germany’s preferred approach. Nevertheless, doubts about the U.S.’s continued willingness to support its allies, particularly given the dismissive attitudes displayed by President Trump and Secretary of War Hegseth, have sparked a public debate about the need for alternatives to the proverbial U.S. “nuclear umbrella.” Even Chancellor Merz, a traditional Atlanticist, has made statements questioning the U.S. willingness to provide nuclear protection. Consequently, he and many other European leaders accepted French President Macron’s March offer to engage in nuclear dialogue.

Last Friday, at a meeting of the Franco-German Security and Defense Council at a German air base, Merz and Macron agreed that this year, the Bundeswehr would participate for the first time in a nuclear exercise conducted by the French Army.⁴ German soldiers will participate in the exercise’s conventional phase. According to the official statement,

³ Federal Ministry of Defense, *The overall concept of military defence. Military Strategy and Plan for the Armed Forces: Responsibility for Europe*, April 2026, p. 19, para 5.1, <https://www.bmvg.de/resource/blob/6093998/678875025812878cfa657f9801f62ffc/dl-gesamtkonzeption-der-verteidigung-eng-data.pdf>.

⁴ Bundeswehr beteiligt sich erstmals an Nuklearübung der französischen Armee, *Die Welt* (online), July 17, 2026, <https://www.welt.de/politik/deutschland/article6a5a2bcfc722326276499954/merz-verkuendet-bundeswehr-beteiligt-sich-erstmal-an-nuklearuebung-der-franzoesischen-armee.html>.

deploying French “Rafale” fighter jets to a German airbase “marks the first operational step in Franco-German strategic cooperation.”⁵ The previous day, German and French fighter jets took part in a small exercise to mark the practical start of nuclear cooperation. German Eurofighters were refueled in French airspace by a French tanker aircraft.

Merz emphasized that these steps complement Germany’s participation in NATO’s nuclear sharing arrangements, and he has every reason to be cautious. After all, this was the last meeting of the Franco-German Security and Defense Council with President Macron. If the French elect a right-wing government next year, defense cooperation with Germany and other European countries will become much more challenging. Overly optimistic rhetoric from the German government about a French “nuclear umbrella” could backfire, as it could lead to accusations that the incumbent French government was selling out national sovereignty. France, which is the only NATO ally that remains outside the Nuclear Planning Group, has made it very clear that it is not ready to provide extended deterrence in the same way the United States does.

In fact, when compared to the traditional U.S.-centric model, all alternatives look weak. A “Europeanized” nuclear deterrent based on the French and possibly British arsenals offers far less in terms of quantity and quality than the U.S.-centered system, which also has the full weight of American conventional power behind it. The European Union cannot develop a common nuclear policy because Austria and Ireland have signed the Treaty on the Prohibition of Nuclear Weapons (TPNW), which deems nuclear weapons and deterrence illegal. And if some European nations were to initiate national nuclear programs, mistrust could grow to the point of jeopardizing the entire European project. It is for good reasons, therefore, that the German government has ignored the discussions on a “German bomb,” leaving the issue on the fringe.

In principle, therefore, the logical thing for Germany to do is to continue to bank on U.S. extended nuclear deterrence, while continuing the dialogue with France and, possibly, the U.K., on nuclear cooperation. After all, the traditional nuclear cooperation in NATO appears to work very well. Many allies have purchased the F-35, and several allies have changed their constitution to allow for the deployment of nuclear weapons on their soil. Even the U.K. has re-engaged in NATO’s nuclear sharing arrangements.

What remains unclear, however, is the role the United States envisages for itself.

The United States is pushing impatiently for a rapid shift in the burden of conventional defense to the Europeans, underscoring these demands with aggressive language, including in official documents. These tactics may be effective in convincing European allies to accelerate their defense transformation. However, this approach is inconsistent with the logic of promising nuclear protection. After all, U.S. extended nuclear deterrence is only credible if Washington considers its allies’ security to be a vital interest. The current narrative from Washington, which also features a worrying indifference toward Ukraine,

⁵ Conclusion of the Franco-German Defence and Security Council, July 17, 2026, <https://www.elysee.fr/en/emmanuel-macron/2026/07/17/conclusion-of-the-franco-german-defence-and-security-council-1>.

does not reassure many Europeans that Europe is still of vital interest to the United States.⁶ To put it bluntly, if you indicate that you no longer wish to play a significant role in defending Europe, you will not assume nuclear risks to defend that continent. That is why the “everything must change” narrative on conventional deterrence sits uncomfortably with the “no need for change” narrative in the nuclear realm.

That said, as long as the conventional presence of the United States in Europe does not drop to a mere token presence, one could argue that its nuclear commitment to NATO allies remains credible. Consequently, as long as the United States does not call its “nuclear umbrella” into question, neither will Germany, even though the search for a nuclear “Plan B” will continue.

⁶ A recent survey published by the European Council on Foreign Relations revealed that in all European countries surveyed, only 11 percent of those Europeans polled still regarded the United States as an ally. In Germany, traditionally a very Atlanticist country, only 8 per cent still see the United States as an ally. See Jana Kobzová and Paweł Zerka, “Home alone: Europeans are ready to defend themselves,” *Policy Brief*, European Council on Foreign Relations, June 10, 2026, <https://ecfr.eu/publication/home-alone-europeans-are-ready-to-defend-themselves/>.



INTERVIEWS

This section of the *Journal* features an interview with The Honorable Mark T. Esper, who served as the 27th Secretary of Defense and the 23rd Secretary of the Army. In the interview, David Trachtenberg asks questions about Secretary Esper's views of the most pressing national security threats to the United States; regional challenges in Europe, Asia, and the Middle East; the changing nature of warfare; nuclear modernization and missile defense efforts; and impediments to success in the Pentagon bureaucracy.

An Interview With The Honorable Mark T. Esper, former Secretary of Defense and Secretary of the Army

Q. What, in your view, are the most significant national security challenges facing the United States today and how well prepared is the United States to deal with them?

A. The most significant national security challenge facing the United States today is the People's Republic of China (PRC), and it will remain so for the coming decades. The PRC wants to displace the United States and become the world's dominant power by 2049. To achieve this goal, Beijing has developed a comprehensive long-term strategy that includes building a modern military that is the world's largest, dominating key sectors of the global economy, possessing ample diplomatic influence, undermining the United States and its allies, and so on. America's aim must be to meet them head on in each of these areas in a whole-of-government/whole-of-country approach designed to sustain, increase, or regain overmatch, while also leading the world's democracies to see China for the threat it is and take appropriate action. It is important that we work with our allies and partners – our strategic advantage – during this period to deter Chinese aggression and reshape Beijing's behavior.

Q. As a former Secretary of Defense and Secretary of the Army, what do you consider the main impediments to sound, timely decision making within the Pentagon? Are they bureaucratic, institutional, fiscal, political, technological, or a combination of the above?

A. There are many impediments to timely action at the Pentagon. Weapons acquisition is a particularly troubling area given the large budgets involved, the speed of technological change, the complex bureaucracy, the demands of joint warfighting, and the needs of our service members, among other things. Chief among these are a prevailing culture of risk aversion and unaligned incentives in the broad middle management of the Pentagon; cumbersome weapons approval procedures that can cause unnecessary delays and increased cost; and a lengthy and uncertain congressional appropriations process that is too



slow to meet today's threats and the speed of technological change while also denying Pentagon leaders the authority and flexibility they need to do both.

Q. China has been described as the “pacing threat” guiding U.S. military efforts. Do you believe the United States has sufficiently prioritized the capability investments necessary to deter China and potential Chinese aggression against Taiwan or U.S. interests in the Indo-Pacific?

A. The U.S. military takes the China threat very seriously and is committing a good deal of time, energy, and resources on this problem. My larger concern is that the United States does not have a comprehensive whole-of-government/whole-of-country strategy to deal with the PRC – technologically, economically, diplomatically, informationally, etc. – let alone do so in a coordinated manner with our allies and partners. That said, I believe deterrence also depends on the demonstrated capabilities and perceived will of our allies and partners abroad. A decisive deterrent to a Chinese attempt to seize Taiwan, for example, begins with a well-armed Republic of China (ROC) military that possesses a broad range of asymmetric capabilities and an associated warfighting strategy; a highly-capable active duty force backed up by an extremely large and trained reserve force; large stockpiles of the munitions, commodities, and resources needed to sustain the fight and the population for several weeks; and a visible and convincing ethos across the island that the Taiwanese people will fight like the Ukrainians to defend their sovereignty and independence.

Q. A recent public opinion poll in Europe indicated an increase in the number of Europeans that see China in more friendly terms than the United States. How serious is this and what should be done about it?

A. If the polling is accurate, then it is a serious issue that must be addressed. I believe that the United States must remain the leader of the free world, and that we do so by acting on our democratic principles, leading with our values, and engaging our friends and allies in a positive way to advance our goals and interests. This will begin the process of changing others' opinions. In addition to maintaining the best military in the world, it also means we must place greater emphasis on the soft power of our diplomatic corps, smartly leveraging our foreign assistance and foreign military sales, breaking down barriers to expanded trade, reenergizing our public diplomacy, and looking for areas to cooperate and collaborate with friends on issues of mutual interest. At the same time, we should not hesitate to highlight China's malign national goals, its poor record in areas like human rights and freedom of religion, its willingness to break international law or abandon global norms in matters such as trade and intellectual property protections, and the frequency by which it bullies its neighbors and others who cross Beijing's path.

Q. How do you assess the importance and political and technical viability of President Trump's "Golden Dome" initiative? Do you believe such an initiative can be implemented in a sufficiently timely manner to counter effectively growing missile threats to the U.S. homeland?

A. It is important that the United States continue to develop the means to protect the homeland and the American people from accidental or intentional missile launches. The threat to our country currently exists from longstanding adversaries such as Russia to newer ones like North Korea. Meanwhile, China is expanding its strategic forces and Iran aspires to build such capabilities. That said, from a programmatic perspective, the first questions to be asked are whether we have the technology to build a missile defense "dome" that can reliably protect the entire country, and second, what are the fiscal and opportunity costs of doing so. The answers to these questions are critical to assessing whether such a program is politically viable and addressing a host of other issues.

Q. Are space-based elements, including both sensors and shooters, necessary for Golden Dome to meet its stated objectives? Or can the system accomplish its goals using only terrestrial-based elements?

A. Space-based sensors and C3I [Command, Control, Communications, and Intelligence] are necessary for any national missile defense system. Space-based shooters, when integrated into a broader and robust network, would be a great feature of such a defense that could provide even greater reliability, flexibility, and performance as complements to ground-based systems, assuming the technology is viable, reliable, scalable, and reasonably affordable.

Q. How do you assess the current conflict with Iran? In your view, did Operation Midnight Hammer and Operation Epic Fury succeed in achieving their stated goals? What more should be done to ensure that Iran does not acquire a nuclear weapon? Is a negotiated agreement with Iran a viable solution to the current conflict?

A. My sense is that Operation Midnight Hammer was successful in setting back Iran's nuclear ambitions by many months, if not years. The head of the IAEA said as much as well. Regarding Operation Epic Fury, the U.S. military was successful in significantly degrading Iran's conventional military forces. These tactical achievements have yet to translate into strategic success, however, which I define as a permanent reopening of the Strait of Hormuz and the conclusion of a long-term nuclear arrangement with Tehran that completely, irreversibly, and verifiably checks the country's nuclear ambitions.

Q. The Russia-Ukraine conflict is now in its fifth year, with many observers believing the Ukrainians have done a remarkable job developing and employing sophisticated technology to stymie Russian advances and impose harsher costs on Russia. The Trump Administration has encouraged Europeans to shoulder more of the burden of assisting Ukraine in its defense against Russian aggression. Should the United States do more to assist Ukraine or step back and allow the Europeans to take up the slack?

A. Ukraine has done a remarkable job in blunting Russia's advances, and may have begun turning the tide in the conflict through a combination of grit, perseverance, technical innovation, and strategic prowess. It is good and right that our European allies share more of the burden when it comes to supporting Ukraine. I think they and other democracies around the world should do more in a number of areas. That said, the United States can also do more to support Ukraine, relative to where we can uniquely contribute and in the context of the other global threats against which we must continue to deter and defend.

Q. Drone warfare is becoming a staple of modern-day conflict. Russia, Iran, and Iranian proxies have launched thousands of drones against military and civilian targets in Ukraine, Israel, and the Gulf Arab states. How should the United States plan to counter drone warfare and is the United States investing sufficient resources in this effort to succeed?

A. Drone warfare, both offensive and defensive, will be an important (though not exclusive) and growing part of military operations now and in the future. American industry and innovators have put forward numerous solutions to drone-based problem sets. In the context of drone defense, the challenge is building effective and reliable counter-UAS systems that are relatively inexpensive and can be built and deployed in volume at scale. Achieving this will likely require a combination of low-cost missiles, counter drones, guns, and directed energy (laser and high-power microwave) that are employed in ways (e.g. layered) and at times that will offer the best defense.

Q. The NATO alliance has been buffeted by political strains and uncertainties that some observers believe may fracture the unity of the alliance and lead to its ultimate demise. Do you believe this is a possible outcome and, if so, what should the United States do about it?

A. NATO has been an effective and credible alliance that has helped keep the peace in Europe and served American interests for decades. The alliance has also faced political strains in the past and overcome them. That said, there are many things about NATO that should be reviewed and reformed if the alliance is to remain effective and credible in the years ahead, especially now that we are in an era of great power competition with a hot war in Ukraine. Getting NATO countries to spend more on defense is an important start. This additional funding must be translated into readiness and real capabilities, however, that can be

deployed to deter adversaries and defend allies. And member capitals must be willing to significantly grow their armed forces and employ them as needed, without condition. If fundamental changes such as these can be made and sustained, then NATO will endure because of the value effective collective defense can provide to like-minded democracies that face threats from authoritarian states as close as Russia and as far away as China.

Q. North Korea has received relatively scant attention of late in light of other world developments. How serious a security threat is North Korea and what should the United States do about it?

A. North Korea remains a current and growing security risk to America's allies in Asia, principally South Korea and Japan, and increasingly to the United States itself. The DPRK continues to sustain large conventional forces, complemented by growing drone capabilities, along the demilitarized zone (DMZ), while also reportedly expanding its nuclear arsenal and working to develop a capable ICBM. On top of these force developments, Pyongyang is also cooperating more with Russia, where it is benefiting from technology exchanges and gaining battlefield experience in Ukraine. As such, U.S. policy towards North Korea needs to be revitalized, beginning with our allies and partners in Asia, to develop a comprehensive plan to both bolster our own defenses and cooperation while also diplomatically engaging Pyongyang and its supporters.

Q. Do you consider the program of record for U.S strategic and theater nuclear forces to be adequate for U.S. strategic and extended deterrence purposes, given contemporary and emerging threats? What, if any, hedging measures should the United States take now to help prepare for the future?

A. The United States is making considerable investments in all legs of the nuclear triad. These are generational investments that have been ongoing for years and are long overdue. In addition to these major investments, the United States must continue to build adequate and reliable missile defenses (ballistic, cruise, and hypersonic); keep modernizing our space-based and other sensors to guarantee we have sufficient early warning capabilities; ensure we have strong export controls and security procedures to deny our adversaries access to cutting-edge technology that might improve their own capabilities; build robust nuclear command and control systems with adequate cyber security and other defenses to protect them; and, explore other ways to deploy and employ strategic weapons to bolster deterrence. Lastly, in an era of drone warfare, we must ensure our strategic forces and their bases in the United States are protected against drone surveillance and attack.



LITERATURE REVIEW

Michaela Dodge, *Enduring Arms Control Myths: A Century of Experience* (Fairfax, VA: National Institute Press, 2026), 134 pp.

Dr. Michaela Dodge has authored an *Occasional Paper*, *Enduring Arms Control Myths: A Century of Experience*, that is as unique as it is important. She examines the arms control process, as practiced by Washington, and finds that it is driven by enduring myths and fantasies. These are the pathologies of U.S. arms control practice that opponents are able to exploit—leading to agreements that are oversold to the public and unwary officials and are ultimately damaging to U.S. security.

For example, Dr. Dodge examines the enduring, but generally mistaken, expectation that the arms control process is a dynamic that fosters improved political relations, and thereby independently moderates threats. Historically, the reverse appears to be true—significant hostilities frustrate U.S. arms control endeavors; if and when political hostilities ease, the drive for arms moderates and arms control can move. This is the truth behind Colin Gray's frequent quip characterizing arms control from the 1920s to the 1990s, "As peace breaks out, can arms control be far behind?"¹ He posits the corresponding reality that "arms control must fail" in the context of politically hostile relations—particularly with authoritarian opponents.

The fanciful expectation that the arms control process itself will foster benign political relations places priority on maintaining the process and agreements, rather than on how the substance of agreements affects relative power positions and whether opponents are abiding by the terms of agreements. Given this priority, to protect the process, Washington typically is loath to call out and seriously act upon opponents' non-compliance and continues to adhere to the substance and "spirit" of an agreement long after opponents have done neither. Such behavior may prolong an agreement and process, but it betrays the integrity of both and can damage U.S. security.

It is only too easy to spin out yarns about arms control arrangements that would solve political problems, limit threats, and contribute to Western security. Doing so is a popular sport among American academics and advocates²—as if opponents with hostile designs actually are willing to limit the capabilities they deem critical to their political goals and will abide by agreements that do so.

The difficulties almost always ignored, however, are that authoritarian states hostile to the West typically violate arms control restrictions that become inconvenient and will not oblige Washington's visions by giving up power they believe to be critical to their revisionist/expansionist goals. Their hostile political goals are the priority drivers of their armaments, not adherence to agreements, and their arms control agenda is to secure advantages over the United States to the extent possible to help advance those goals. This

¹ Colin S. Gray, *House of Cards: Why Arms Control Must Fail* (Ithaca, NY: Cornell University Press, 1992), p. 25.

² See for example, Rose Gottemoeller, "Nuclear Deterrence Is Changing—So must Diplomacy," *The Freedom Frequency* (Hoover Institution), September 4, 2026, at <https://www.thefreedomfrequency.org/p/nuclear-deterrence-is-changingso>.



should not be difficult to understand, but such harsh realities often are essentially denied or downplayed in U.S. arms control parlance, for fear that limiting U.S. power might be seen as imprudent. When the enduring American idealistic vision of non-zero-sum agreements to which parties will righteously adhere meets reality, the results are predictably disadvantageous for the United States. Dr. Dodge's work shows this unfortunate dynamic happening repeatedly for a century.

Not since Colin Gray's seminal works on this subject, *The Soviet-American Arms Race* (1976) and *House of Cards: Why Arms Control Must Fail* (1992), has a book-length, scholarly work so effectively demolished the enduring arms control pathologies that have served only to undermine American practice for a century. With her new text, Dr. Dodge goes beyond those earlier works by identifying the interrelated conceptual myths and fantasies that have wreaked havoc on U.S. arms control practice and illustrates those myths and fantasies with historical cases from the early twentieth century to the present. To demonstrate her points, she moves seamlessly from the conceptual to the empirical.

Dr. Dodge concludes that, unless Washington can control for these enduring arms control pathologies, with a designated Red Team specifically tasked to stand guard against them, the process almost inevitably will continue to lead to U.S. negotiating positions and agreements that fail to live up to their hype and ultimately disadvantage U.S. and Western security. This is an inconvenient truth that runs counter to most official and public commentary on the subject in Washington, and in the West in general. Indeed, by starkly calling out the problem set as vividly as she does, Dr. Dodge shows herself willing to risk the wrath of a well-funded American arms control industry, much of which is deeply invested in the myths and fantasies that drive U.S. arms control enthusiasms and practice and will disdain an honest headline that this emperor truly has no clothes.

Dr. Dodge's efforts here should be considered a great public service because, in American political culture, arms control typically is assumed to be an unalloyed good—every administration yearns to show its virtue by bringing home a shiny arms control trophy. This is unlikely to change. Consequently, if Washington is to persist in the endeavor, despite its near consistent record of failure, it should approach the process in a manner that is worthy of the effort. To do so, it must, as Dr. Dodge concludes, control for the enduring pathologies she highlights. If not, the process will continue to generate disappointment and damage U.S. security. And, if administrations continue to publicly invest so much hype and effort into the endeavor, they will continue to resist acknowledging its failures and opponents' unmitigated hostility, threats and noncompliance—until compelled to do so by opponents' manifest brazenness. As Dr. Dodge suggests, a lower level of public investment in pursuit of reflected political virtue would limit the need for pretense and opacity when the results inevitably fall short.

In summary, Michaela Dodge has delivered an analysis that demonstrates the great need for realism in the U.S. approach to arms control and the dangers of contrary existing practice. This is a unique text that tells an unvarnished truth. It is an understatement to say that anyone who is interested in arms control, has a role in the practice of arms control, or comments on arms control should read *Enduring Arms Control Myths: A Century of*

Experience, and be open to the hard lessons it presents. As America seeks to find its way in a new and much more dangerous nuclear threat environment, getting arms control right could not be more important.

*Reviewed by Keith B. Payne
National Institute for Public Policy*

David Holloway, *Nuclear Weapons: An International History* (Yale, CT: Yale University Press, 2026), 895 pages.

David Holloway's *Nuclear Weapons: An International History* is an account of the development of U.S. nuclear weapons and nuclear strategy with shorter incursions to other states' nuclear weapons programs, and efforts to minimize their spread. The author focuses on the Cold War, omitting the post-Cold War developments, but with the book running at almost 900 pages (including extensive references and bibliography), such a delineation is understandable. The author does not aim to provide a comprehensive history of individual states' nuclear weapons programs, but of their relationships and interactions as they pertain to nuclear weapons developments. The primary focus is on the United States, the Soviet Union, Europe (France, the United Kingdom, and the North Atlantic Treaty Organization), China, India, and Pakistan. The book is organized chronologically and begins with a discussion of a U.S. nascent nuclear weapons program during the World War II, originally started for a fear that Nazi Germany will develop the bomb first.

Holloway discusses early efforts to limit nuclear weapons proliferation while democratizing the benefits of nuclear energy, and the accompanying development in thinking on how to use nuclear weapons in achieving a state's national security objectives, including in the Indochina War 1954, the First Taiwan Strait Crisis (1954-1955), the Hungarian Revolution (1956), and the Suez Crisis (1956). The cases are relatively short, and therefore not particularly in-depth. The author's conclusion from these crises against a nascent nuclear backdrop is that "nobody deliberately created a 'recognizable risk of war' that they did not control."

The Berlin Crisis and the Cuban Missile Crisis are each discussed in their own chapter, so does the development of "assured destruction" and the negotiations leading up to the Strategic Arms Limitation Talks. With regard to the latter, Holloway mostly relies on accounts provided by participants of these negotiations, which are almost exclusively couched in positive terms. Thus the author forewent an opportunity to more critically examine the negotiations' negative impacts on U.S. ability to counter the Soviet developments and policies, including the lasting damage to U.S. missile defense concepts and programs. In that sense, the interpretation of arms control is quite conventional.

The chapter on Sino-Soviet relations discusses the uneasy partnership-turned-animosity between China and the Soviet Union during China's quest for nuclear weapons leading to an outright hostility between the two countries in 1969.

As the author notes in the introduction, this is not a comprehensive history of nuclear weapons. People familiar with the topic will find interesting vignettes and references, but, depending on how familiar they are with these issues, they are unlikely to find the book fundamentally new or insightful, and will have different opinions on the merit of which important events, documents, and thinkers the author chose not discuss. The cost of covering a relatively long period of time is that the treatment of each of the relevant topics is abbreviated and therefore by necessity relatively shallow. The reviewer would recommend the book to readers seeking general orientation in nuclear weapons history, or those who simply enjoy reading this type of material.

*Reviewed by Michaela Dodge
National Institute for Public Policy*

Thomas Kent, *The Propaganda Manual of the Ukraine War, Information Warfare by Russia, Ukraine, and Western Nations: Lessons Learned for Future Conflicts*, American Foreign Policy Council, 2026, 487 pp.

The term "propaganda" originates from the Latin "propagare," which means "to spread" or "to propagate." Over the years, the term has taken on a decidedly negative connotation, creating the impression that propaganda is intended to spread false or misleading information to convince someone of something that is untrue, i.e., an evil influence to be avoided, shunned, and countered.

In *The Propaganda Manual of the Ukraine War*, Thomas Kent masterfully dissects Russia's use of propaganda to spread falsehoods about Russia's invasion of Ukraine in an attempt to influence the opinions of both ordinary Russians and, more broadly, a global audience in support of the supposed righteousness and necessity of Moscow's "special military operation" against its democratic neighbor. In this endeavor, Kent is well credentialed to speak authoritatively on the subject, having been a well-respected journalist and former president and CEO of Radio Free Europe/Radio Liberty. His observations illuminate the historical, cultural, and even religious underpinnings of Russian information operations (IO), and the playbook Russia uses to spread disinformation about its actions and what it perceives as an all-out Western war against Russia. In the information battlespace that characterizes the war of ideas, he concludes that Russia has an inherent advantage over the West, noting that it is "much more difficult for Western countries to promote the concept of democracy, with all its complex institutions and processes, than for Russia to spread a nihilistic view that everything is a fraud and nothing matters but force."

Kent also assesses Ukraine's efforts to shape world opinion in its favor and the country's transition from an information war neophyte to a more sophisticated actor after Russia's invasion. He explains that initially, "It was harder for Ukraine to respond to Russia's claims [of Ukrainian atrocities] than it was for the Kremlin to make them." In time, however, Kyiv adapted its strategy to promulgate a narrative suggesting the entire democratic world was facing an "existential threat" from Russia, not just Ukraine, and that the smaller nation could indeed score impressive victories against its aggressive, bullying, and more powerful neighbor. The book is replete with examples demonstrating Ukraine's efforts to reclaim the information operations advantage using a whole-of society approach involving the media, non-governmental organizations, civil activists, social media outlets, and other elements of society. However, as the conflict extended from weeks to months to years, apparently transitioning to what many observers have characterized as a prolonged stalemate, Ukraine found it increasingly difficult to put points on the IO board, so to speak, as foreign interest in the conflict waned, the costs of Western support to Kyiv increased, and other world events diverted the attention of governments and their respective publics.

Importantly, Kent analyzes the Western reaction and response to this war of narratives and concludes that the West suffers from significant cultural and structural disadvantages that complicate successful public diplomacy. He notes, "Information warfare never sat well with Western publics." "The very term 'propaganda' was an uncomfortable one for Western democracies," he writes, explaining that Western publics were "ill at ease" with covert psychological warfare activities intended to counter enemy propaganda. In essence, he argues that the West has been handicapped in its efforts to expose disinformation and convey the truth due to a cultural and ethical bias against such activities that many analysts view as unseemly.

The general Western distaste of operating in the information sphere recalls the moral and ethical dilemma reflected in then-Secretary of State Henry L. Stimson's comment in 1929 that "Gentlemen do not read each other's mail." Moreover, obtaining consensus to adopt a unified strategy and approach to IO among a multitude of Western democracies with different national perspectives and interests has long been challenging. In the case of Russia's invasion of Ukraine, Kent argues it was "impossible." In addition, politics, economics, and the possible escalatory actions Russia might take in response to Western operations (including "fear," which Kent suggests may be "the most essential human emotion") had a strong dissuasive effect, and the information activities conducted by the West were "episodic and disjointed." Consequently, he concludes, "the whole dynamic of the situation made Putin the chief driver of events."

Structurally, the book is well organized, with separate sections describing the information strategies, structures, and tactics of Russia, Ukraine, and the West and highlighting their methods, successes, and failures. The personnel, organizations, and entities involved in IO are meticulously described. In the United States, changes in administrations resulted in different philosophies, programs, priorities, and approaches that have contributed to confusion, chaos, and a lack of cohesion in U.S. policy. (The situation surrounding the Voice of America is but one of many examples Kent highlights.) Importantly,

the different approaches toward IO taken by all parties to the Ukraine conflict illuminate the challenges Western democracies face in confronting and countering false narratives. The statement often misattributed to Winston Churchill sums it up appropriately: “A lie gets halfway around the world before the truth has a chance to get its pants on.”

Fortunately, Kent offers the reader some thoughtful suggestions to the burgeoning problem of information warfare. These include working to develop an informed population, conducting media literacy campaigns, promoting “fact-checkers,” exposing hostile narratives, exploiting legal remedies, and actively seeking to neutralize adversary tactics. Yet, he acknowledges that there are drawbacks and difficulties to these methods that make success challenging.

Kent concludes by drawing several propaganda lessons learned from the Russia-Ukraine war, pointing out the numerous difficulties involved in measuring success. He assesses the strengths and weaknesses of the information warfare strategy, tactics, and operations conducted by Russia, Ukraine, and Western countries, including the missed opportunities each party failed to exploit. As a result, he offers numerous recommendations to improve the resilience of Western governments and private entities, including the media, to counter the growing sophistication of adversary propaganda and information operations.

The Propaganda Manual of the Ukraine War effectively melds extensive scholarship with analytical rigor. It is a veritable treasure trove of useful information on the critical subject of modern-day information warfare. As the nature of warfare evolves, IO and psychological warfare activities are becoming ever more commonplace and part of the campaign to shape the battlefield. Those who fail to understand the growing role and value of information warfare activities are likely to find themselves on the losing end of future conflicts. In this regard, Kent’s book—extensively documented and chock-a-block with contemporary examples—is a definitive work that provides not only a useful primer on this contemporary aspect of warfare but also serves as a roadmap for countering the malicious propaganda of America’s adversaries and those who seek the West’s demise. Hopefully, its message will not go unheeded.

*Reviewed by David J. Trachtenberg
National Institute for Public Policy*



DOCUMENTATION

The Documentation Section includes Former Deputy Under Secretary of Defense for Policy and Senior Scholar at the National Institute for Public Policy David J. Trachtenberg's prepared statement from a September 2026 Senate Armed Services Subcommittee on Strategic Forces hearing on the Golden Dome for America. In it, he considered the increasing missile threat to the U.S. homeland and the value that missile defense provides in such an environment. He argues that Congress must provide the necessary resources to advance U.S. missile defense efforts. The second document offers select excerpts from Under Secretary of War for Policy Elbridge Colby's remarks to the North Atlantic Council. Under Secretary Colby discussed the requirement for North Atlantic Treaty Organization (NATO) members to increase their defense spending and commented on the ongoing reassessment of the U.S. posture in Europe. Third, this *Journal* issue provides select excerpts from Under Secretary Colby's remarks at the 2026 United States Strategic Command Deterrence Symposium in August 2026. Under Secretary Colby elaborated on the Administration's approach to nuclear deterrence, the ongoing mini-review of U.S. nuclear posture, and the types of capabilities the United States might pursue to strengthen deterrence in a regional context, given negative developments in the threat landscape, including China's nuclear buildup. Fourth are select excerpts from Secretary of War Pete Hegseth's remarks at the 2026 NATO Defense Ministerial in Brussels. Secretary Hegseth discussed the Administration's vision for a stronger NATO focused on territorial defense and the necessity for allies to invest in their conventional defense to achieve that objective.

Document No. 1: Prepared Statement of The Honorable David J. Trachtenberg, Senior Scholar, National Institute for Public Policy, Former Deputy Under Secretary of Defense for Policy Before the Subcommittee on Strategic Forces, Committee on Armed Services, United States Senate, Second Session, 119th Congress, Hearing on the Golden Dome for America Initiative, September 29, 2026.

(As prepared for delivery)

Chairperson Fischer, Ranking Member King, and members of the Strategic Forces Subcommittee, thank you for the invitation to participate in this hearing on President Trump's Golden Dome for America initiative. It is an honor to testify before you today. Madam Chairperson, I would ask that my full statement be submitted for the record.

I have been asked to comment on the strategic threat environment facing the United States and the larger policy issues relating to the Golden Dome effort. My views on this are a matter of public record and some of my testimony today will reflect what I wrote in an *Occasional Paper* published last year by the National Institute for Public Policy titled, *Next Steps in Homeland Missile Defense*.¹ I would also like to submit that paper for the record.

¹ David J. Trachtenberg, *Next Steps in Homeland Missile Defense*, Occasional Paper, Vol. 5, No. 1 (Fairfax, VA: National Institute Press, January 2025), <https://nipp.org/wp-content/uploads/2025/02/Vol.-5-No.-1.pdf>.



I would like to focus on three issues: First, does the strategic threat to the homeland justify the Golden Dome effort? Second, what impediments exist that may stifle progress on Golden Dome? And third, what should be done to overcome these impediments and how might this committee, and Congress more generally, help accomplish this?

#

Regarding the strategic threat to the homeland, there is no question that the United States is increasingly vulnerable to attack by a variety of missile threats, including ballistic, cruise, and hypersonic missiles, as well as from unmanned aerial systems or drones.² Major adversaries such as China and Russia are expanding their strategic missile capabilities with ever greater numbers of sophisticated nuclear and conventional missile systems. China possesses what has been described as the largest and most sophisticated ballistic missile arsenal in Asia and is “conducting the most significant expansion of its missile systems in its history.”³

Since the end of the Cold War, the missile threat to the United States has evolved in ways that complicate defense of the homeland. Ballistic missiles have been seen as the weapon of choice for states seeking to reign terror upon an adversary, as they are difficult to counter. Today, more than 30 countries possess ballistic missiles of varying ranges and capabilities.⁴ Moreover, the ballistic missile threat has been augmented by newer, more sophisticated, types of missiles that are even more difficult to counter. These include hypersonic missiles, cruise missiles, and other types of unmanned aerial systems like drones.

As the director of the Golden Dome for America initiative, General Michael Guetlein, has testified, “A new generation of advanced air and missile threats, unprecedented in their speed, numbers, and lethality, now holds the American homeland at risk.”⁵ As even the Biden Administration’s *2022 Missile Defense Review* noted, “missile-related threats have rapidly expanded in quantity, diversity and sophistication. U.S. national security interests are increasingly at risk from wide-ranging missile arsenals that include offensive ballistic, cruise, and hypersonic weapons....”⁶ And as one former Biden Administration official put it more starkly in congressional testimony, “Offensive missiles are increasingly weapons of choice for

² Glen VanHerck, “Why the Golden Dome Is Essential for Homeland Defense,” *The National Interest*, August 24, 2026, <https://nationalinterest.org/feature/why-the-golden-dome-is-essential-for-homeland-defense>.

³ Statement by General Michael A. Guetlein before the Subcommittee on Strategic Forces, Senate Armed Services Committee, April 27, 2026, p. 3, https://www.armed-services.senate.gov/imo/media/doc/guetlein_opening_statement.pdf.

⁴ Kelsey Davenport, “Worldwide Ballistic Missile Inventories,” *Arms Control Association Fact Sheet*, August 2023, <https://www.armscontrol.org/factsheets/worldwide-ballistic-missileinventories>.

⁵ Cited in Sana Pashankar, “Pentagon Sets Funds, Dates for Secret Golden Dome Space Program,” *Bloomberg News*, August 7, 2026, <https://www.bloomberg.com/news/articles/2026-08-07/pentagon-sets-funds-dates-for-secret-golden-dome-space-program>.

⁶ Department of Defense, *2022 Missile Defense Review*, p. 1, <https://media.defense.gov/2022/Oct/27/2003103845/-1/-1/1/2022-NATIONAL-DEFENSE-STRATEGY-NPR-MDR.pdf>.

Russia, China, North Korea, and Iran, for use in conflict and to coerce and intimidate their neighbors.”⁷

The utility of ballistic, cruise, and other types of missiles in combat has been demonstrated by their effective use in recent conflicts. For example, Azerbaijan’s extensive use of unmanned aerial vehicles or drones in the second war over Nagorno-Karabakh in 2020 led to an impressive victory over Armenian forces. In addition, in the first two years since its full-scale invasion of Ukraine in February 2022, Russia launched more than 11,000 missiles at Ukraine, including ballistic, cruise, unmanned aerial vehicles (drones), and hypersonic missiles.⁸ By some reports, Russia has fired more than 2,000 cruise missiles against Ukrainian targets,⁹ including launching more than 100 cruise missiles and drones in a single attack in December 2023 and again in November 2024.¹⁰ In July of this year, Ukraine reported some 265 cruise missile attacks and more than 8,600 drone strikes.¹¹ In May, Russia targeted Ukraine with nuclear-capable “Oreshnik” intermediate-range ballistic missiles with hypersonic capabilities.¹²

The growing threat of faster, longer-range, and more deadly ballistic, cruise, hypersonic, and other unmanned missiles and systems means that the United States is increasingly at risk of more complex missile attacks, including those employing sophisticated countermeasures. Consequently, missile defense of the U.S. homeland must address these multiple types of threats, either singly or in combination, on an urgent basis.

Importantly, the growth and sophistication of adversary missile systems complicate overall U.S. force planning and may discourage U.S. military action in theaters where the risk of enemy responses against American and allied personnel, bases, and infrastructure may be considered too great. In this way, adversary offensive missile systems can dissuade U.S. leaders from taking necessary actions in support of U.S. interests abroad. This dynamic may have a chilling effect on U.S. decision making and freedom of action. As missile threats to the

⁷ Testimony of Dr. John Plumb before the Senate Armed Services Committee Strategic Forces Subcommittee, May 18, 2022, https://www.armed-services.senate.gov/imo/media/doc/ASD%20Plumb%20SASC%20SF%20Missile%20Defense%20Written%20Statement%20-%20May,18%202022_FINAL.pdf.

⁸ Benjamin Jensen and Yasir Atalan, “Assessing Russian Firepower Strikes in Ukraine,” Center for Strategic and International Studies, October 23, 2024, <https://www.csis.org/analysis/assessing-russian-firepower-strikesukraine>.

⁹ Valentyna Romanenko, “Russia has launched 2,437 cruise missiles since February 2022 – Ukraine’s Air Force spokesperson,” *Ukrainska Pravda*, June 3, 2025, <https://www.pravda.com.ua/eng/news/2025/06/03/7515375/>.

¹⁰ See Victoria Butenko, Maria Kostenko, Mariya Knight, Svitlana Vlasova and Christian Edwards, “Russia unleashes biggest air attack on Ukraine since start of full-scale invasion,” *CNN*, December 30, 2023,

<https://edition.cnn.com/2023/12/29/europe/ukrainerussia-airstrikes-intl-hnk/index.html>; David Brennan, “Russia launches ‘massive’ drone and missile energy blitz across Ukraine,” *ABC News*, November 28, 2024, <https://abcnews.go.com/International/russia-launches-massivedrone-missile-energy-blitz-ukraine/story?id=116299874>.

¹¹ Cited at <https://www.facebook.com/themilitarychannelusa/posts/read-ukraines-ministry-of-defense-reported-that-russian-forces-launched-265-crui/122225686334902462/>.

¹² Tetyana Oliynyk, “Putin says Oreshnik missile was fired against Ukraine to ‘conveniently observe impact,’” *Ukrainska Pravda*, June 4, 2026, <https://www.pravda.com.ua/eng/news/2026/06/04/8037802/>; Yuliia Dysa and Max Hunder, “Russia hits Ukraine with Oreshnik missile in one of war’s biggest attacks on Kyiv,” *Reuters*, May 23, 2026, <https://www.reuters.com/world/europe/ukraines-capital-kyiv-hit-by-massive-missile-drone-attack-2026-05-23/>.

homeland grow, the United States may be deterred by adversary coercive nuclear or conventional threats, unwilling to risk the potential consequences of an opponent's response to U.S. military action—even when such action is justified. In this way, missile systems need not be employed in combat to have a significant dissuasive effect on U.S. actions. An effective missile defense system can help to mitigate the dissuasive effect of enemy missile threats. Moreover, as long as the U.S. homeland remains vulnerable to expanding missile threats and the proclivities of opponents to threaten actual nuclear use, the United States may be increasingly reluctant to take military action in support of threatened allies and friends. This would undermine longstanding U.S. extended deterrence policy.

In 2023, the congressionally mandated, bipartisan Strategic Posture Commission noted that “to date the United States has chosen to not build homeland missile defenses against major powers” and that U.S. homeland defense capabilities “do not adequately protect the critical infrastructure necessary to project power and avoid coercion in light of growing Russian and Chinese nuclear and conventional strike threats.”¹³ Consequently, the Commission recommended that the United States “develop and field homeland IAMD [integrated air and missile defense] capabilities that can deter and defeat coercive attacks by Russia and China.”¹⁴ The Trump Administration should publicly endorse the bipartisan conclusions of the Strategic Posture Commission and accelerate efforts to enhance U.S. missile defense capabilities in light of the growing missile threat to the homeland.

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Second, what are the most significant impediments to Golden Dome's success? I believe they reflect more political, bureaucratic, and institutional biases rather than technological or fiscal challenges.

Progress in homeland missile defense has been stymied by outdated Cold War nostrums, anemic funding, lack of prioritization, organizational and bureaucratic roadblocks, and ideologically based political opposition. Political opposition to Golden Dome is rooted in the Cold War notion that defending the nation from missile attacks is unnecessary and destabilizing – unnecessary because deterrence is and will remain reliable, and destabilizing because it will spark an arms race as others seek to build even more offensive capabilities to overwhelm the defense. Both notions are seriously flawed and based on dubious assumptions or demonstrably false.

The notion that deterrence can be relied on to succeed indefinitely is a comforting but likely unrealistic proposition, especially in light of Moscow's extensive nuclear building program, its belligerent actions—including its full-scale invasion of Ukraine—and its numerous bellicose nuclear threats against the West. In addition, China's massive expansion of its own nuclear arsenal, its increasingly aggressive posturing over Taiwan, and its growing

¹³ Madelyn R. Creedon, Jon L. Kyl, et al., *America's Strategic Posture: The Final Report of the Congressional Commission on the Strategic Posture of the United States*, October 2023, p. 28, <https://www.ida.org/assets/2026/06/18084611/Strategic-Posture-Commission-Report.pdf>.

¹⁴ *Ibid.*, pp. X, 72, 105.

military collaboration with Russia as part of what has been called the “Axis of Authoritarians” suggest that the prospect of coercive nuclear threats and opportunistic aggression in a two-nuclear-peer environment is a growing and realistic concern.

Moreover, the notion that Golden Dome will spark a U.S.-driven “action-reaction” offensive arms race as adversaries seek to counter it is belied by the fact that adversaries have been developing more sophisticated nuclear-capable offensive missiles for years while the United States has not. Indeed, the oft-cited notion that U.S. actions are the primary driver of adversary reactions and the corollary notion that U.S. restraint will engender adversary restraint have been disproven by history.¹⁵

In addition, some opponents argue that Golden Dome can never be 100 percent effective against large, sophisticated missile threats. But perfection, of course, is not the objective. Heightening the uncertainty of success in an adversary’s calculation of whether to launch an attack in the first place strengthens deterrence. And providing some protection against the possible failure of deterrence is, in my view, the only morally acceptable course of action for a government whose primary constitutional duty is to protect the safety and security of Americans. In light of the growing threats to U.S. security from both peer nuclear adversaries and rogue states, the time has come to abandon the outdated thinking that American vulnerability to missile attack is a stabilizing feature of the international environment.

There is also an institutional bias within the Pentagon and the defense establishment that has worked against progress on improved missile defenses. This bias is the result of many factors, including a lack of understanding of deterrence issues, a belief that nuclear use by adversaries against the homeland is a far-fetched possibility, a focus on speculative and often inflated cost estimates, the desire to spend limited resources on what are perceived to be other more urgent priorities, a culture of risk avoidance, and concerns over technological feasibility, especially defenses in space.

Experts who understand the technical aspects of missile defense, including former directors of the Missile Defense Agency, have stated that Golden Dome is both cost-effective and technologically feasible. As one noted, “Moving to space is the only way to defeat a growing quantity and quality of adversary threats. It is the only means to provide an effective boost/ascent phase missile defense capability essential to defeat current and future threats. There is simply no other technically feasible option....”¹⁶ And General Guetlein noted recently that two Golden Dome tests were “phenomenally successful.”¹⁷

With respect to cost issues, I would like to comment on the various cost estimates for Golden Dome that have been circulating in the media. The CBO, for example, has estimated

¹⁵ See, for example, Hon. David J. Trachtenberg, Study Director, Dr. Michaela Dodge, and Dr. Keith B. Payne, *The “Action-Reaction” Arms Race Narrative vs. Historical Realities* (Fairfax, VA: National Institute Press, March 2021), <https://nipp.org/wp-content/uploads/2021/04/Action-Reaction-pub.pdf>.

¹⁶ Lt. Gen. Henry “Trey” Obering, III (Ret.), Remarks at symposium on “Overcoming the Roadblocks to Homeland Missile Defense,” hosted by National Institute for Public Policy, July 20, 2022, printed in *Journal of Policy & Strategy*, Vol. 3, No. 1, p. 104, <https://nipp.org/wpcontent/uploads/2023/03/Proceedings-July-2022.pdf>.

¹⁷ Thomas Novelty, “‘There is no Golden Dome’ unless Congress prioritizes funding, general warns,” *Defense One*, August 11, 2026, https://www.defenseone.com/policy/2026/08/golden-dome-congress-general/415355/?utm_campaign=dfn-ebb&utm_medium=email&utm_source=sailthru.

that the cost of Golden Dome could top \$1.2 trillion over 20 years.¹⁸ Others have estimated the cost could reach as much as \$3.6 trillion over 20 years.¹⁹ There are several points that need to be made, however, to put all such cost estimates in proper context.

First, estimating the cost of any system over a 20-year period is fraught with uncertainty and likely to be wrong, perhaps wildly so. It is based on certain assumptions regarding technology development, programmatic architecture, industrial base support, and other variables that are not necessarily valid. Indeed, some may be unknown and unknowable at present.²⁰ General Guetlein has stated that the CBO estimate is an uninformed “myth” and does not accurately portray the planned Golden Dome architecture, noting that “sensational cost estimates” are “all false.”²¹ Of course, it is not unusual for the cost of any program to look exorbitant and prohibitive to the average person if extended over a period of two decades. Indeed, the cost of conventional force modernization may be in the trillions of dollars if estimated over a period of several decades, but that is not a valid argument for forgoing necessary conventional force enhancements. The publicly postulated cost estimates for Golden Dome may be right or wrong, but allowing such speculative, crystal ball-like estimates to drive policy decisions, regardless of the methodology used, is shortsighted and unwise.

Second, there is an unfortunate tendency by many to confuse *cost* with *value*. The two are not synonymous. The cost of Golden Dome may indeed be high in monetary terms, but that cost may pale in significance to the value Golden Dome provides in defending the nation from the growing threat of missile attack. Indeed, Golden Dome is intended not only to protect the United States against possible missile attack but also to strengthen deterrence of such an attack in the first place by diminishing the odds that an aggressor can count on successfully achieving his military objectives. And in weighing cost, it is important to consider the cost of rebuilding a major American city should deterrence fail, for whatever reason. In this regard, Golden Dome is the nation’s ultimate insurance policy, and, in my view, its value as both a deterrent to missile attack and a defense against such an attack far exceeds its cost. If we are not willing to pay the premium for the protection it promises, then we must shoulder the potentially catastrophic consequences that may flow from accepting the risk of deterrence failure.

Finally, those who assert that Golden Dome is “unaffordable” are confusing the issue of affordability with spending preferences. In other words, it is not that Golden Dome is

¹⁸ David Arthur and Christopher Martin, et. al., “Potential Costs of a National Missile Defense System,” Congressional Budget Office, May 2026, <https://www.cbo.gov/system/files/2026-05/62379-golden-dome.pdf>.

¹⁹ Todd Harrison, *Build Your Own Golden Dome: A Framework for Understanding Costs, Choices, and Tradeoffs*, AEI Foreign & Defense Policy Working Paper 2025-20, September 2025, <https://www.aei.org/wp-content/uploads/2025/09/WP-Estimating-the-Cost-of-Golden-Dome.pdf?x68881>.

²⁰ For a critical assessment of the CBO methodology, see Christopher Stone, “A Response to the Opponents of Space-Based Interceptors in Golden Dome,” *RealClear Defense*, June 23, 2026, https://www.realcleardefense.com/articles/2026/06/23/a_response_to_the_opponents_of_space-based_interceptors_in_golden_dome_1190312.html.

²¹ Novelly, op. cit.; Also see Rachel S. Cohen, “Golden Dome cost estimate draws Pentagon pushback,” *Federal News Network*, August 20, 2026, <https://federalnewsnetwork.com/defense-main/2026/08/golden-dome-cost-estimate-draws-pentagon-pushback/>.

unaffordable, but rather that critics believe the fiscal resources it requires would be better spent on other priorities.²² Let me be clear: There is a legitimate debate to be had over the proper prioritization of limited defense resources, but suggesting that speculative and extreme cost estimates make the Golden Dome effort unaffordable is misleading at best and disingenuous at worst.

Ultimately, it is a question of whether the nation is willing to accept the risk of remaining relatively defenseless in perpetuity against emerging, more sophisticated, and more capable adversary missile threats to the homeland, including those posed by major nuclear adversaries like Russia and China. I would hope the Congress' answer to this question would be a resounding no.

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Finally, there is the question of what should be done to overcome these impediments and how this committee, and Congress more generally, might help accomplish this. On this question, I would make several observations.

First, it is important for the Congress to reaffirm its clear and unequivocal support for Golden Dome in the NDAA and to codify as a matter of policy that the United States shall be defended against all types of missile threats, of any range, launched from any location. Over the years, congressional language has been schizophrenic on this issue, sometimes expressing support for a more robust missile defense capability, other times favoring a missile defense system that can counter only limited missile threats to the homeland and stating that it is U.S. policy to rely on strategic deterrence and the threat of nuclear retaliation rather than active defenses to protect the nation against more sophisticated long-range missile threats from peer adversaries.

I commend the Congress for modifying U.S. missile defense policy in the FY2026 NDAA by declaring that it is the policy of the United States to defend against “the threat of foreign attack by increasingly complex ballistic, hypersonic glide, and cruise missiles, and other advanced aerial threats,” without restricting this effort to limited missile threats or rogue state actors only.²³ While the language also recognizes that our nuclear deterrent remains an essential component of our deterrent posture, it should be augmented by active defensive measures to guard against the risk of deterrence failure. Golden Dome promises just that.

Second, Congress needs to exercise fully its oversight role to ensure the administration moves out swiftly and smartly to make the promise of Golden Dome a reality. This includes support for, and greater investment in, space-based sensors that can provide early warning, tracking, and discrimination capabilities, as well as kinetic and non-kinetic defensive intercept capabilities, including directed energy systems. In this regard, Israel's experience

²² For a discussion of this issue as it relates to spending on nuclear weapons programs, see Dr. Keith B. Payne and Dr. John S. Foster, Jr., et. al., *A New Nuclear Review for a New Age* (Fairfax, VA: National Institute Press, April 2017), pp. 185-198, <https://nipp.org/wp-content/uploads/2021/03/A-New-Nuclear-Review-final.pdf>.

²³ Section 1651 of the *National Defense Authorization Act for Fiscal Year 2026* (Public Law 119-60), December 18, 2025, <https://www.govinfo.gov/content/pkg/PLAW-119publ60/pdf/PLAW-119publ60.pdf>.

with its “Iron Beam” system may be instructive. Directed energy technology can potentially change the offense-defense cost curve significantly in favor of the defense, nullifying one of the most frequently cited arguments against missile defense, namely, that defensive interceptors are significantly more costly than the offensive missiles they are intended to counter.

As adversary missile threats grow and become increasingly capable, the role of space-based assets takes on greater significance and should be pursued with all due urgency. The benefits of developing a space-based intercept capability are numerous. It would allow longer-range missiles to be countered in their boost-phase, when they are most vulnerable due to highly visible signatures while their engines are burning, or in their ascent-phase prior to payload separation. A boost- or ascent-phase defense would also allow the destruction of missiles over enemy territory rather than over U.S. soil. This, in itself, could serve as a powerful deterrent to missile attack. And it would also help mitigate the technical challenges faced by terrestrial mid-course and terminal missile defense systems that face geographic, trajectory, and other limitations and are likely to encounter enemy decoys and countermeasures.²⁴ Cold War-era platitudes that space-based defenses will result in the “militarization of space” or the “weaponization of space” ignore decades of adversary efforts to develop and improve anti-satellite (ASAT) capabilities, fractional orbital bombardment systems (FOBS), and other counter-space activities. In short, the time to debate the value of space for the missile defense mission is over.

Third, a “business-as-usual” approach to missile defense is inadequate. To its credit, the Trump Administration is seeking to accelerate the acquisition of critical military capabilities, reduce production timelines, and rebuild the necessary defense infrastructure to stay ahead of the threat curve.²⁵ But this will require greater congressional support and commensurate, long-term funding. While there are those inside the defense establishment who will object to the Golden Dome effort as syphoning off needed funds for other priority defense projects, the potentially catastrophic consequences of failing to implement Golden Dome successfully make overcoming the critics’ objections imperative. Indeed, Executive Order 14186 makes clear that this initiative is a presidential priority,²⁶ and the administration must communicate forcefully the rationale for and importance of Golden Dome at every opportunity.

²⁴ Ian Williams and Masao Dahlgren, et al, *Boost-Phase Missile Defense: Interrogating the Assumptions*, Center for Strategic and International Studies, June 2022, p. 1, https://csis-websiteprod.s3.amazonaws.com/s3fspublic/publication/220624_Karako_BoostPhase_MissileDefense.pdf?VersionId=WjJxINM58oru1LK21LC9untewoK_UAQD.

²⁵ See, for example, Pranshu Verma, “Pentagon presses defense firms to build weapons as Iran war depletes stocks,” *The Washington Post*, August 8, 2026, <https://www.washingtonpost.com/technology/2026/08/08/pentagon-presses-defense-firms-build-weapons-iran-war-depletes-stocks/>; Filip Timotija, “Pentagon pushing defense contractors to speed up weapons production,” *The Hill*, August 10, 2026, <https://thehill.com/policy/defense/6020032-pentagon-demands-faster-weapons-production/>; Department of War, “Department of War Launches the ‘Golden Dome for America Hub’ To Accelerate Industry Engagement, Revolutionize Homeland Missile Defense Partnerships,” *News Release*, August 11, 2026, <https://www.war.gov/News/Releases/Release/Article/4568639/departments-of-war-launches-the-golden-dome-for-america-hub-to-accelerate-indust/>.

²⁶ The White House, “The Iron Dome for America,” Executive Order 14186, January 27, 2025, <https://www.presidency.ucsb.edu/documents/executive-order-14186-the-iron-dome-for-america>.

Although Program Managers are generally risk averse given that failure is seldom rewarded, true progress is only possible through bold action. Indeed, we often learn more from our failures than our successes, and Congress should encourage boldness in this endeavor. The stakes are too high to do otherwise.

Finally, Congress must provide the necessary fiscal resources to implement Golden Dome over the long term. This means committing to a regular and steady appropriations funding stream that is not subject to the uncertain vagaries of reconciliation bills, continuing resolutions, ill-advised programmatic trade-offs, or partisan hostage-taking. The defense of the American people requires nothing less.

In the past, Congress authorized multiyear advance appropriations to protect the nation against national security threats deemed particularly dangerous.²⁷ While such an approach for Golden Dome may be considered extraordinary and may not engender the requisite bipartisan support, I cite this example to indicate that where Congress has the will, it can surely find innovative ways to ensure that Golden Dome is adequately funded over the long term.

With these initial comments, I appreciate the opportunity to offer my views to the subcommittee and look forward to your questions. Thank you.

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Document No. 2. U.S. Department of War, *Remarks by Under Secretary of War for Policy Elbridge Colby to NATO's North Atlantic Council (As Prepared)*, August 27, 2026, (select excerpts).²⁸

[...] My purpose today is to give you, our allies, a clear sense of our strategic and overall approach in this important initiative and then invite your feedback, building on conversations already underway among many of our teams. [...] Fundamentally, we believe that in order to survive and indeed thrive, NATO must change. [...]

We term this NATO 3.0: restoring an alliance grounded in flexible realism; focused on warfighting readiness; and designed to deter, defend, and sustain peace in the North Atlantic area—even under conditions of simultaneity, with our allies taking primary responsibility for Europe's conventional defense.

To be sure, not everyone agreed with this need for change and that approach. [...] both the United States and Europe essentially now agree on this critical point: we must make NATO more focused on warfighting readiness, more balanced, and more pragmatic. This is not a transient view, but rather a structural and strategic necessity, particularly in light of the

²⁷ "Project BioShield" was one example of a 10-year advance appropriation to defend the nation against the threat of bioterrorism and is discussed in David J. Trachtenberg, *The Lawgivers' Struggle: How Congress Wields Power in National Security Decision Making* (Fairfax, VA: National Institute Press, 2020), pp. 242-246.

²⁸ The full text of these remarks can be found at <https://www.war.gov/News/Speeches/Speech/Article/4584638/remarks-by-under-secretary-of-war-for-policy-elbridge-colby-to-natos-north-atla/>.

simultaneity problem. Moreover, it not only benefits the American people by making NATO more balanced, it is also to Europe's benefit because it will make the alliance more sustainable and durable.

Among almost all NATO allies, the conversation has now turned from whether this needs to happen to how best to make NATO 3.0 a reality and how to do so most rapidly and effectively. This is exactly where the conversation should be, concentrating in matters of timing, force development, budget allocation, and managing risk. This is the kind of pragmatic, strategic, realistic conversation that needs to happen, and represents a fundamental and welcome shift from the almost-theological focus that characterized the transatlantic relationship until very recently. [...] Coming to a shared perception that NATO needs to adapt to the NATO 3.0 model is vital, but this is only a beginning. It represents a recognition of our need to adapt — but is not the adaptation itself.

It is in that spirit that we have embarked on a review of U.S. force posture and basing in Europe [...]

First and foremost, we are proceeding in a spirit of flexible realism and strategic rigor, as you will have seen in the Terms of Reference distributed to your capitals at the beginning of this effort.

Second, we are doing so to advance and accelerate NATO 3.0, to make the alliance more fit for the times and for the strategic requirements that the United States as well as our allies face.

In this vein, over the last few weeks, our teams have been working hard to think strategically, broadly, and rigorously about how to adapt America's strategic posture in Europe for the age in which we find ourselves and going forward. This is not a narrow review about places and bases alone, although those are of course important. Rather, it is a look at our strategic posture here in the broader sense, designed to enable our Joint Force to meet the priorities laid out in the National Security Strategy and the National Defense Strategy. It will encourage, enable, and impel a transition to a more durable and powerful European-led conventional defense of the continent, consistent with NATO's original and noble purpose. That is, the goal is for Europeans to be partners, not dependencies—not just, I stress, for our sake but for yours as well, so that NATO can always reliably defend Europe effectively, even in the most stressing scenarios.

In this effort, we have no preconceived fixed goal or outcome. There are several starting points from which we proceeded, however: the priorities of our nation as laid out in our canonical Strategies are on the Western Hemisphere and the First Island Chain, even as Europe remains a critical area for the United States and the NATO alliance a key part of European and Atlantic security. We also know that our European allies can step up to assume primary responsibility for their own conventional defense and have made historic commitments to make that a reality, which will enable the Alliance to defend Europe effectively even in the case of simultaneous contingencies. We also know that our allies can and will lead in supporting Ukraine's self-defense, and that this is highly consonant with Ukraine's own battlefield successes. At the same time, we know that a significant portion of U.S. force posture in Europe derives from the Cold War era. Further, we know that Europe is

not only important but also provides a critical node for the projection of U.S. military power on all our behalf, both in this theater and beyond, and helps contribute to the defense of the U.S. homeland. These are the kinds of factors which we are incorporating into our analysis.

Allow me to stress another critical point: consultations and engagement are a vital part of this review. [...]

I simply cannot stress enough how significant this shift is, and candidly, I do not believe we pay enough attention to how dramatic our progress so far has been. While we should not slip into a false sense of complacency on this point – indeed, a great deal of the real work still lies ahead of us – I also believe we should recognize the significance of what has happened and the historic opportunity it provides. After a generation of disarmament and functional demilitarization, many countries in Europe, including several of Europe's largest and most advanced economies, are rebuilding their military strength for collective defense. They are making real sacrifices, some even going so far as to change their constitutions and raising their retirement age. That is extraordinary.

Accordingly, we must not waste this opportunity. Now is the time, when the concrete is still wet, to set the trajectory for the coming decade and beyond, to make the best use of that extraordinary shift brought about by President Trump and key European leaders.

Our approach, and this review, are designed to accelerate and build on this. To be clear, this does not mean a return to an idle reassurance of the past. Rather, it means looking with clear eyes and strategic realism at the geopolitical and military situation that we face here in the North Atlantic and European areas, but also for us Americans around the globe, especially in our own hemisphere and along the First Island Chain. [...]

Document No. 3. U.S. Department of War, *Remarks by Under Secretary of War for Policy Elbridge Colby at the 2026 United States Strategic Command Deterrence Symposium, August 5, 2026* (select excerpts)²⁹

UNDER SECRETARY COLBY: [...] nuclear strategy and nuclear forces are absolutely essential part [sic] of the national defense strategy. [...] The nuclear forces, the modernization of our nuclear deterrent is the single most important initiative for the American military. At the end of the day, we have to have a survivable, diversified triad. We have to have secure second-strike forces. We have to be able to provide strategic deterrence and a capable and credible extended deterrent that's coupled with our conventional forces as part of an integrated, broader, sensible strategy. [...]

²⁹ The full text of these remarks can be found at <https://www.war.gov/News/Transcripts/Transcript/Article/4567089/remarks-by-under-secretary-of-war-for-policy-elbridge-colby-at-the-2026-united/>.

We looked back at the first term's nuclear posture review for 2018. We said, look, a lot of the really excellent work on things like declaratory policy have already been done on the importance of the deterrent, and for instance, today I have no announcement to make on change on declaratory policy. There's nothing to improve on what we've said on extreme circumstances and so forth. [...]

[...] the fact that we didn't do a nuclear posture review is actually, if anything, the opposite of saying it's unimportant. It's saying this is so important, we know where we're going...now it's about execution. And so what we did do, we decided, and there's been some reporting about this recently, is that if you look at the statutory responsibilities of the undersecretary for policy, there's a review or sort of relook at the employment guidance. [...] we need to have a military strategy and that includes at the nuclear level, in which the ends, ways, means correlate. [...] in some quarters or in a period of unipolarity in some ways the civilian guidance could get pushed over into the world of ends. And in a world of nuclear armed states in which you might find yourselves in a fight with you have to be able to say that the ways and means to achieve those ends are all correlated [...] we have to have a nuclear strategy to use [Henry] Kissinger's line of thought that's connected to our conventional force strategy that is rationally correlated to the United States interests at stake and a rational conception of the risks they therefore are willing to run. That is the acme of skill. That is the metric by which we judge not only our conventional force posture but also our nuclear force posture. [...] We need to look at them together. [...]

[...] we're making those alliances and partners work. We're making sure that it's correlated, that our allies and partners, as in the Cold War, as in NATO 1.0, are capable of fielding combat credible forces to make sure that we have that ends, ways, means connection. But everything we're doing at the nuclear level as well is designed to make sure that we expand the president's options to make sure that the president has those options as part, if you will, it's almost downstream of flexible response [...].

AMBASSADOR MICHAEL FROMAN: How do you expect that to differ from what came out of the prior administration?

UNDER SECRETARY COLBY: So it's a bit difficult because this is not designed to be a public-facing review. [...] I wouldn't contrast it specifically so much with the last administration as I would say that it's an attempt to go back and again to use this NATO 1.0 kind of framework would be used to go back to a level of thinking about nuclear weapons and their connection to potential large-scale conflict. God forbid, of course, the goal here being very much to deter and avoid such a conflict. [...] You couple military strengthening and a rational military strategy that includes the allies, along with their willingness to engage on arms control of whatever type. [...]

AMBASSADOR FROMAN: [...] How do you think about the impact of having two potential nuclear peers? Is there strategic stability in a world where you have a three-body problem, or are we destined to have a numerical arms race?

UNDER SECRETARY COLBY: [...] I think it is an unprecedented problem in the sense that during the Cold War, the Chinese obviously did have nuclear weapons, but they were far, far smaller and more primitive force at the time than the United States and the Soviet Union. So

I think it is a dramatically different capability. I remain cautiously optimistic about the ability for us to maintain effective deterrence in the context of three sort of great power nuclear states. I'm not sanguine about that. I think there's a lot of thinking, including this audience, that could productively be done along those lines.

[...] We are trying to obviously deter and if necessary defeat or retaliate against attacks on the United States homeland, which of course would be a massive dramatic escalation. But also we want to sustain favorable regional balances of power in the world's key theaters, you know including preeminently Asia, the Asia-Pacific, the Indo-Pacific, and specifically as National Security Strategy says about, you know, provide deterrence by denial along the first island chain. [...] That is a problem that can be solved. [...]

AMBASSADOR FROMAN: Is it realistic to expect China to participate in any sort of arms control negotiation per se, or given where we are in arms control, morality, are they likely to be building up all that force?

UNDER SECRETARY COLBY: [...] Arms control really is not necessarily a formal structure, like a legal treaty-bound structure. [...] So the real function of, a lot of the function of arms control can be providing implicit barriers or thresholds or something [...] But you know, it's not necessarily all or nothing. If you're having productive discussions, and also if those discussions make it more difficult for [...] the other side to potentially do dramatic things that might put them in a stronger military position, that can be productive. And also, the goal of arms control is not elimination, which is unrealistic. The goal of arms control is to mitigate pressures towards conflict or unnecessary products, pressures towards arms racing, that kind of thing.

AMBASSADOR FROMAN: [...] What does the administration want to see as a successor to New Start [Strategic Arms Reduction Treaty]? If it's not a formal treaty, what kind of mechanisms in place would like to see this in Russia, given the changing nature of great power competition there as well?

UNDER SECRETARY COLBY: [...] I'd say, from the department's perspective, you know, we obviously need to be ready, postured. [...] we have a lot of national technical means and a couple ways of keeping a close eye. [...] Whether you have a treaty or not, I think we stand postured to support diplomacy in whichever direction the president decides to take it. But I think our job, both on the civilian side and the uniformed side, is to make sure that we go ahead, we develop, we deploy the capabilities that we need. [...]

AMBASSADOR FROMAN: We've seen in the context of Ukraine, Russia allowing weapons and doing a lot more nuclear saber rattling. Is that just coercive theatre, or has the threshold for the use of nuclear weapons been effectively lowered?

UNDER SECRETARY COLBY: [...] I think it's highly in the mind of the eyes of the beholder. [...] I think we have to take seriously [...] when a nuclear armed power starts talking about those things. Obviously, taking it seriously also means not just backing down. To the contrary, you do not want to create that perception that you can be advantaged by nuclear blackmail which the Chinese used to accuse us of.

[...] firstly, we are actively trying to support the president's objective, obviously we are not in the lead, but through diplomacy, through the special envoys, State Department to

support an end of what is a very tragic war. [...] We've structured a mechanism, the PURL [Prioritised Ukraine Requirements List] mechanism, to continue to provide weaponry to Ukraine in its self-defense and a very admirable self-defense, stout self-defense. At the same time [...], we view this as having moved in the direction this administration, the president, others, the vice president, Secretary Hegseth have pointed to, which is our point was never we're going to you know skedaddle from Europe. The point was the Europeans have greater interest here. We have global responsibilities and priorities. The Europeans can and should take a leading role in, A), their own defense, which is NATO 3.0 which is happening, and I think cannot be stressed enough, and secondly, that they can and will take the lead in the support of Ukraine, and that that support will be consistent with Ukraine doing at least reasonably well in the battle. [...]

One, the Europeans are now essentially providing financial support for Ukraine, and they and the Ukrainians are increasingly producing their own military equipment, which is good also because it's more sustainable. And that has been consistent with the Ukrainians probably improving their position on the battlefield, without being too sanguine about the future, I think that is also putting you know globally again in that same ends, ways, means rational correlation. We're basically moving to a situation where, and I can't stress this enough, where thanks to the president's leadership, we are being put in a position where our alliance and partnership network is going to be put on firmer ground, on stouter ground, where the Europeans are providing a greater share of the effort and the skin of the game and the weaponry and the military risk, and that's happening in other theaters as well: South Korea, Australia. We're hoping to see big announcements from Japan this year under the Takaichi government [...] Obviously, we're trying to see if there's a peace that can be made, but also we have to prepare for the long haul.

[...] Well, I think you know it's not a mistake that the National Security Strategy, the National Defense Strategy, call for a national mobilization of our defense industrial base because the president, vice president, secretary have all been very consistent over the years and saying we need to step up our defense industrial base capability, and that's something that we've been working on since this administration started.

And the historic 1.5 trillion-dollar budget request is an essential part of that. One of the points that I made clearly, if you want to provide munitions to allies and partners like Ukraine or Israel or whoever, those weapons are going to be concentrated in what is now, I think, Reconciliation 4.0. I mean, that is a critical, a critical step, and that's where a lot of framework agreements are going to be funded. So you know whether you're a Republican, you're a Democrat, you're an Independent, whatever. Everybody has been talking for several years about the need to get this defense industrial base up, you know, and to take it to the next level. [...] I think we have the capabilities that we need to back up the president, not only in Iran, elsewhere, to support deterrence by denial along the first island chain, so we feel very confident about that. But we all recognize that there's, we need to bring the defense industrial base up, and of course, also part of that is you know new entrants and cheaper options. [...] we do not want to fight like the Ukrainians. [...] Clearly, drones are important. I think there's over \$70 billion in drone and drone dominance and counter UAS [unmanned aerial systems]

in the budget. [...] You can't underestimate the importance of B-21 long-range bombers. And if you look at the capabilities that were delivered very, very effectively against Iran, the heavy bombers played an absolutely critical role. If you look at Operation Midnight Hammer, which was the incredibly successful operation last year, that was done by attack submarines firing Tomahawks, by heavy bombers and aircraft that were fifth gen aircraft that were escorting them. [...]

The second part of this is allies and partners [...] Yes, we have the world's largest economies, or not all of them, but the most advanced economies as part of our alliance network. But we need to turn that into military effectiveness and industrial effectiveness, and that's what's happening now. And I want to give special credit to the Germans. [...] But in the space of about the last year and a half, [...] going to 4% by 2029, I believe maybe even higher. Extraordinary. That's the world's fourth largest economy. South Korea has committed to 3.5 percent to take primary responsibility for its own defense on the peninsula. Also very significant. We see other countries in Scandinavia, Norway, Sweden, Finland. Denmark is doing well. The Netherlands. So we see a real momentum, of course, Poland. So what's going to happen here is obviously that's going to lead to military readiness [...]

But the goal here is to make sure those investments are effective. [...] We encourage countries to do more. We encourage countries to indigenize their capabilities. That makes sense. It's totally reasonable. But let's do it together, and that's going to be another part of that industrial base strategy. [...] They can help us a lot, you know. And that's a win-win. That's a mutually beneficial relationship that isn't based on platitudes, but it's based on mutual self-interest. And the hallmark of this administration is if we get our relationship in a one that's more based on mutual self-interest, it's going to be more durable. It's going to be more resilient. It's going to be more stable. It's going to involve a lot less of allies kind of asking for theological commitments [...]

[...] Our position is still very much to discourage and oppose friendly nuclear proliferation. [...] absolutely, the most important thing that we can do on the Department of War side to make sure that there are not such pressures for friendly nuclear proliferation is to make sure that we have credible, rational nuclear options that a President of the United States adopting the simple principle of being a normal human being with common sense would actually implement. [...] we are trying to make sure that we expand those options so that we give the president options, including counterforce options, strategic counterforce options [...] support denial defense, favoring managing escalation. [...] So we have to make sure that we can give the president a cost-benefit rational option that would benefit the American people [...]

[...] let's look at where this is going, where it could go, and say, okay, how do we avoid that? Well, some of it is the diplomacy [...] But our part is to say we're going to have a military strategy that could make sense to actually put into practice. [...] At the end of the day, something happening halfway around the world, and when you kind of face that, if the president, God forbid, were to be faced with that kind of decision, it's got to be worth it. And we can we can see that problem, so we should anticipate it.

That's the mindset. And so when we're going about this review. It's not because we say, "Oh, we need this weapon or that weapon.["] Again, from a force development point of view, we pretty much know largely, and it's not about tactical weapons or strategic weapons. It's about giving a set of options that are consistent with the strategy, that contribute to denial defense, that contribute to favorably managing escalation, that are cost-benefit rational to a normal person, and so on.

AMBASSADOR FROMAN: [...] What's the one thing European powers or NATO allies can do to increase an alliance nuclear deterrence, and should, given the security situation in Europe should there be a movement towards more of a nuclear triad?

UNDER SECRETARY COLBY: So I would actually say the best thing the Europeans can do for nuclear deterrence is to invest in their conventional forces [...] we continue to extend nuclear deterrence to NATO. The biggest problem there would be if there are conventional gaps that could be exploited, and then a kind of brinkmanship approach by the opponent to put us in a very just a very unfavorable position. And so the key thing there, in light of all the requirements we face globally, is for European allies to dramatically move, to increase spending in line with the Hague summit [...] It's not about everybody doing 5% and buying their own, you know, indigenously developed fifth gen fighter. It's about meeting General [Alexus] Grynkeiwich's requirements as Supreme Allied Commander. He's obviously also the EUCOM commander, but at the end of the day, he is the one responsible for fighting NATO as a force together, as an international force, he has a clear sense. We are very aligned. [...] What we want to do is make sure that we're as effective as possible in generating readiness, combat-credible readiness, and deployments as quickly as possible, in line with that theory, and then the industrial capacity to back that up.

[...] We had a meeting in Bergen, Norway, U.S. organized and hosted by the Norwegians, which we brought together about half a dozen kind of key allies who are really moving and meeting an objective set of standards and amount of their spending, they're on clear track to meet 3.5% as rapidly as possible. They have industrial scale, and they're looking at getting down to business. And they're consistent with the strong and clear but quiet approach that the administration generally pursues. [...] And the idea there is to form kind of smaller coalitions. [...] Whereas I think we look at multilateral as let's try and solve a particular problem. You know, FOMO diplomacy is a real thing I've learned over the last year and a half – fear of missing out diplomacy. People care, and they should because we're going to get moving out. We're going to the countries that are moving out most quickly. We're going to look to network them together. We're going to look to give them the best kind of access to American industry and so forth, and build and collaborate. And so, you know, I think countries like Germany, countries like Poland, there's a tremendous opportunity, especially if they scale together. That is the best thing. If you have a strong European denial defense that can rapidly deploy to the Eastern front or flank, depending on which side you are on that debate, then the United States still has, still... will have very modern capability, strategic level, theater capability, limited options, etc. as well as our own conventional forces and the global capabilities that our armed forces provide, that is going to be a very effective deterrent that's consistent. [...]

[...] I mean, again, the way we look at things in the Department of War is results- oriented. So you know there's a lot of work and effort and political capital that's necessary to build up these kind of multilateral structures, and it's not always clear you know how much payoff there is, especially at the military level. So we're you know it's we're flexible realists, as the National Security Strategy says. So we look at military reality, we look at geography, we look at interests, and we try to align based on that. [...] So get them to concentrate where their interests are most engaged. Likewise, in the Indo-Pacific, you've got our allies and partners are arrayed across a vast territory. They have different histories. They are not historically bound together. So we're open to working together in a minilateral way. [...] Are the soldiers ready? Are they relevant to the plan? So the way we look at it with our allies and partners, where we put our capital, is to say, let's move forward. [...] in the case of South Korea [...] on the defense issues, we're saying they want to take more responsibility. They have universal conscription. They have a large standing military. They're committing to 3.5 (percent). Check. They're willing to take primary responsibility for conventional defense of South Korea against the North. Check. Right. Okay. There's a lot. Then we can work together. There's a lot we can do together.

Japan. Japan is the fourth or fifth largest country in the world by economic scale. It forms an absolutely essential part of the first island chain. It currently stands by 1.6 percent GDP on defense. Prime Minister Takaichi has a historic majority in the Diet, Japan itself talks very openly about facing an unprecedented situation. Something doesn't compute here. But we're working very closely with our good friends and colleagues in Tokyo to help advance this. But we are anxiously looking for Japan. This is shared across the administration. I stress that we are anxiously looking for Japan to step up [...] we understand they have a history. Germany has a history. It went from about 1.5 percent, maybe one to 1.5 percent, to a four to 5 percent commitment in the space of about a year. They changed their constitution. Obviously, debt carries a lot of fraught memories in Germany. They relaxed the debt break on it. Change is possible. Change is necessary.

You know, with the Australians, we're doing well. We did an AUKUS review in 2025. [...] We came out stronger. We have clearer expectations. [...] Everybody understands how important our submarines are. [...] We have no better ally than the Australians. [...]

We're going to have deterrence by denial. But the goal is stability. The goal is not to change the status quo [...] We have great respect for the Chinese nation and trying to understand their goals to become once again a great power in the world. We can deal with that from a position of a favorable balance of power. Our job is to make sure that's absolutely clear from the military point of view. [...]

AMBASSADOR FROMAN: You've emphasized the importance of conventional deterrence in the Indo-Pacific, but as China invests more in tactical nuclear weapons, where do you think the balance of investments you can afford for us between conventional and nuclear capabilities?

UNDER SECRETARY COLBY: [...] you know nuclear weapons are incredibly important. They are more difficult than they first appear to turn to coercive or compellent purposes. [...] we and China both have nuclear weapons, so nobody's going to be in a position where they

can absolutely dominate. [...] Obviously, the Chinese are very clear that they have very profound stakes. We always remind them that we have been a Pacific power for 200 years. [...] The Indo-Pacific is also the world's largest market [...] So we're going to be there, but we're going to have a strategy and force posture that is rationally tied to that interest is very important. [...]

[...] a critical point is we sort of have a strategy of denial at the geopolitical level, which is about balance of power. So we are against anybody being hegemonic. [...] we're not trying to dominate everybody in the Western Hemisphere. We want countries that can step up and take responsibility on their own. [...]

But also at the military level, our goal is on denial. So China is undertaking a historic military buildup that is incredibly impressive and a reflection of the enormous industrial capacity and economic power that they've accumulated. That is one thing. On the other hand, if we are talking about military contingencies, God forbid, our purpose here is to avoid them. But they face a very, very challenging military problem [...] They would be trying to project military power across air and water, which, in the face of determined, capable, highly developed opponents [...] All we have to do is prevent anybody from crossing a body of water and sustaining operations in the face of determined resistance. That is a very practical objective. [...] We see this is a tractable objective that is militarily viable and would result in hopefully in peace. And it's totally consistent with having a respectful, balanced power relationship, decent peace with China, in which China can continue to grow, can continue to expand its economic activities, etc. And then we can find that balance peacefully.

AMBASSADOR FROMAN: Can you speak to the relationship between strategic defenses like Golden Dome and deterrence in a trilateral great power nuclear environment?

UNDER SECRETARY COLBY: [...] As we go through this nuclear strategy review, this is not something where we are unconscious about the effects on red, as we call it. In fact, to the contrary, we are, I would say, very, very attuned to how the other side will perceive, could potentially perceive both force developments and postures, rhetoric, but also you know employment capabilities and options. Again, not to say we would rule them out, but this is you know I think one of the hallmarks of good thinking and good strategy is that you should contemplate that your opponent or potential opponent will react to what you do, especially over time, is you know kind of an iterative game, and you need to make sure that your step is framed in a way that's going to leave you in a better position. [...]

If you're deploying Pershing, if you're if you're going through Able Archer, you need to understand how that's going to...and then just calculate that risk balance. And I can say that this administration is very attuned to those balances. I mean, you have historic military, you know, budget, historic attempt to mobilize our national defense industrial base, but at the same time, a realistic attunement to the reactions not only of our allies and others but also to red.

AMBASSADOR FROMAN: [...] How confident are you that we are dealing with the threats of emerging technologies to our capability of delivering on that deterrence mission?

UNDER SECRETARY COLBY: Well, I'm confident that the people who are responsible for it are approaching it with the requisite sense of urgency and seriousness. [...] Technology is

essential, but technology is only part – also posture, force employment, you know, best practices, these kinds of things. [...] But at the macro level, I think this has been a real, in a sense, proof that we needed to prepare for limited war. [...] Ukrainians are, you know, conducting operations deep in Russian territory that also affect their strategic capacities, and then we see Russia's response, and both sides are very much calibrating their responses. You look at the strikes at shipping, for instance, in the Black Sea, or you look at the at the campaign, the mutual very tragic, obviously air and missile, largely missile and drone campaign. I think the main takeaway for us is again, not to be a hammer and a nail, but as we need to have a plausible plan that doesn't...'well if we get to that point we blow up the world or you know, we take them out you know, problem solved.' No, no, no because realistically, God forbid, if, if we found ourselves in such a situation with the great power on nuclear weapons, what we're seeing in Ukraine is that things can actually get quite high up that ladder and still be quite calibrated. [...]

But I think that's what I take away is that as vital as the strategic deterrent is, and having that fundamental second strike, that assured destruction capacity, we also need to have things, whether it's theater capabilities or strategic capabilities, that's an arms control thing that goes back to the, you know, definitions. What we're focused on is less about the range of the weapons and more about rationally employable, limited options that advantage us and stand the chance of favorably managing escalation and not getting us into an inexorable spiral.

AMBASSADOR FROMAN: So, last question, an easy one for you: What is the nuclear threat you're most worried about if peace (inaudible)

UNDER SECRETARY COLBY: [...] What I would fear more is a regional war. [...] a kind of local war, conventional war that might have local employment, God forbid, of nuclear weapons that could escalate from there as it, as it expanded outward. [...] this is where it is really necessary to see how red is thinking about things, not to be kind of stopped in our tracks by it, but to say the decision space [...] could be very tight. So one of the things where we see ourselves again as really expanding the president's decision space is there are things that we might posture ourselves to do where we don't think it would necessarily be a total attack, the other side might think it would be total attack, and their reaction would be far greater than we anticipate, and that would lead very rapidly to an incredibly pressurized situation that would be almost by definition not in our interests.

[...] Again, it's not taking away options for the president. It's adding credible options. Is to say, given all that, how do we effectively prepare to fight a war again to avoid it to uphold our alliance commitments in a rational way that will not, at that vital moment, either result in a catastrophe whose costs are way out of proportion to whatever we're fighting about, or more plausibly cause the political leadership to say "no, I don't want do that," and then you have strategic catastrophe because people say, I was calibrated to something else. [...] We need to keep that fundamental strategic assured destruction capability obviously always ready, but we need to have something that will connect down. [...]

Document No. 4. U.S. Department of War, *Remarks by Secretary of War Pete Hegseth at the 2026 NATO Defense Ministerial in Brussels (As Delivered)*, June 18, 2026 (select excerpts).³⁰

[...] And as I said, my first NATO Defense Ministerial last February, and as the Trump administration has said again and again in the last year and a half, our allies must step up. President Trump has been very clear on this point for many years, and over two administrations, and for too long, NATO has been a paper tiger and a one-way street. No more, and that's what the Hague Summit is all about.

That's what defense spending commitments are all about, transforming NATO back into a real military alliance that's focused on hard power and real deterrence, a NATO 3.0 modeled on the NATO 1.0 that won the Cold War, with our allies actually taking the lead in Europe's conventional defense, and that's what NATO was always supposed to be, and what its framers, like President Eisenhower, always expected. Europe was not supposed to be a dependency of the United States. That's not what Winston Churchill or Charles de Gaulle or Konrad Adenauer wanted or expected. No, Europe was supposed to be a military power allied with a strong America.

[...] [A]s Dwight Eisenhower himself said, as early as 1951 if in 10 years all American troops stationed in Europe for national defense purposes have not been returned to the United States, then this whole process will have failed. [...] he and his allied counterparts, all of them still living in the shadow of World War Two, understood that NATO's power did not come from committees or from meetings or from small flags on fancy tables, it came from warriors, and for Europe's defense, it had come from NATO allies. That was NATO 1.0, a hard-edged war fighting organization, [...] but that spirit faded after the Cold War ended.

[...] NATO 2.0 drifted toward out-of-area operations and things that had nothing to do with war fighting at all. Instead of tanks and fighters and air defenses, the focus had been on gender equity and climate change and defense austerity. Europe's borders flew wide open, welfare states expanded, defense budgets cratered, along with Europe's belief in itself and its civilization. NATO lost its way. NATO 2.0 was an era of distraction, deindustrialization, and demilitarization. It was an era of free riding and those were lost years that we're not going back to.

And that's why at the Department of War we've been so clear and so candid to restore NATO's core military role and character, and that's why we've returned US troop levels in Europe to pre-2022 levels with the redeployment of a brigade combat team last year and further reduction of 5,000 forces earlier this year. At the same time, it's why we've engaged with our allies so consistently, and it's why we've grown our own defense industrial base and encouraged to turn NATO 3.0 into reality, to return the alliance to its roots as a military

³⁰ The full text of these remarks can be found at <https://www.war.gov/News/Speeches/Speech/Article/4539593/remarks-by-secretary-of-war-pete-hegseth-at-the-2026-nato-defense-ministerial-i/>.

alliance, and ensure that it has the European strength required to sustainably deter aggression, and if need be, make good on Article Five.

Some of our allies have gotten the message and stepped up, you know who you are, and we very much appreciate it. Last year, under President Trump's leadership, NATO set the new global standard for allied defense spending, 5% of GDP all in on defense. It's historic and it's transformational, and some allies are already well on their way to meeting this ambitious target, and in some cases ahead of schedule. [...]

Some allies are also getting serious about how they're spending on their defense, in May, the Department of War told allies that we're reducing our contributions to the NATO force model. We also explained how allies can and should backfill those changes. General Grynkewich reports that some allies have stepped up accordingly, and it's a good start. At the same time, just last month, a small group of strong allies gathered at Bergen for a conversation about focused allied defense spending on the capabilities required to defend Europe, even in the event of simultaneous conflicts worldwide. Again, more serious progress on Ukraine as well, progress through President Trump's PURL Initiative, allies have taken the lead in funding support for Ukraine's defense. Ukrainians are holding their lines even in the face of sustained Russian assaults. We said it could be done, that our allies could lead, and that it would be consistent with Ukraine's defense. It is happening, and it's a validation of President Trump's approach, an approach that will set the table for peace.

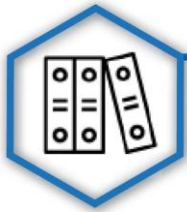
[...] For all of our clarity, too many allied capitals seem to still miss something in translation. Too many allies still don't recognize the historic need that President Trump has made clear to them and to NATO itself to reforge a relevant, powerful military alliance.

[...] These allies, they put America's sons and daughters, our sons and daughters, at risk by denying them the predictable access facing an overflight that never should have been in question at all. In some cases, we had to shift capabilities from one country to another out of NATO allied countries altogether. There's no excuse for that, and that's not to mention the fact that some countries have yet to show a credible path to meeting their Hague commitments. Too much talk, some of NATO's largest economies, some of the richest countries, allies that are happiest to go on about the rules-based international order and middle powers banding together, still seem to think the era of free riding is here. Eisenhower and Trump disagree. [...]

And so, we're doubling down on our effort to make NATO what it always was supposed to be, a balanced alliance with Europe in the lead for its own defense, NATO 3.0 and to make that a reality. I'm announcing today a six-month Department of War review that will examine America's force posture and basing in Europe. [...] This review will be conducted with the benefit of inputs from the United States military, from European command, it will involve consultations with the U. S. Congress and with our allies [...] It will be designed to ensure that NATO is moving fast and irreversibly toward Europe leading, stepping up to take primary responsibility for the defense of Europe, stepping up to ensure our forces are postured for America's global needs, and stepping up to make sure that our access, basing, and overflight are clearly delineated and assured any other country would do the same at the same time.

Going forward, our annual NATO dues will be contingent on other countries meeting their defense spending targets. [...] America cannot care for or pay more for Europe's defense than our allies do. And this review will think outside the box. Our national defense strategy states clearly that we're going to incentivize and enable our allies to step up and do their part, so we're going to keep a close ally, close eye on allies who are not doing that, and who say no, or maybe, or wait and see when it matters most. It's a review that some countries will fail, and others will pass with flying colors. In the end, the review is intended to both improve U.S. force posture and basing and strengthen NATO 3.0. It's intended to be constructive, as we have always been. There are no strategic surprises here. [...]

Our direction of travel is and has been clear. This is the right thing to do by the American people. It's the right thing to do by this alliance. Europe can and must take primary responsibility for its conventional defense as it pledged at the Hague Summit, and in the process safeguarding Europe's defense for generations to come. [...]



FROM THE ARCHIVE

This issue's "From the Archive" section includes a summary of Colin Gray's 2003 article on "Maintaining Effective Deterrence" published by the U.S. Army War College. The article includes practical recommendations for the maintenance of effective deterrence, including developing a more empirically grounded theory of deterrence and maintaining a flexible military posture. The second article features Keith B. Payne's and Lawrence R. Fink's publication "Deterrence Without Defense: Gambling on Perfection," originally published in the Winter 1989 issue of *Strategic Review*. The authors point out that rationality is not a concept universally shared across different states, which makes U.S. strategic policy based on such an assumption fundamentally unreliable. Therefore, damage limitation measures are an essential part of U.S. efforts to deter.

Document No. 1. Colin S. Gray, *Maintaining Effective Deterrence*, "Summary," US Army War College, USAWC Press, August 1, 2003.*

SUMMARY

Deterrence has fallen on hard times. From being the proudest achievement of the U.S. defense community in the Cold War, both intellectually and as policy, strategy, and doctrine, deterrence today looks very much like yesterday's solution to yesterday's dominant problem. Times have changed, and each strategic context promotes the popularity of ideas that seem best suited to help cope with the challenges of the period. This monograph begins by recognizing that, although the Bush administration did not formally retire deterrence as concept or policy, it left observers in no doubt that in the global war it declared against terrorism, deterrence generally would be left on the bench. Whereas deterrence appeared to be resoundingly successful through 40-plus years of Cold War, its utility in the very different conditions of the 21st century is highly problematic at best.

The purpose of this monograph is to explore the state of deterrence now, and to see what can and should be saved from the wreckage of what once was the keystone in the arch of American strategic thought, policy, and strategy. To do this, the text begins by explaining how and why deterrence has fallen out of fashion. Next, it proceeds to detail the main elements in what fairly can be termed the current crisis of deterrence. Finally, the monograph outlines some practical measures, both quite general as well as specific to U.S. landpower, which should maximize the prospects for deterrence being all that it can be, admittedly in some truly demanding circumstances.

It is important to recognize that the monograph is informed by two strong beliefs which probably warrant labelling as assumptions. First, it rests on the conviction that deterrence, though diminished in significance, remains absolutely essential as an element in U.S. grand

* Full article is available at <https://press.armywarcollege.edu/cgi/viewcontent.cgi?article=1786&context=monographs>.



strategy. Second, the monograph reflects the belief that landpower must make a vital contribution to such success for deterrence as may be achievable.

By way of terse explanation: some of the criticisms of deterrence, including those that are valid and indeed are replayed in this monograph, are apt to be silent on the problems with deterrence's policy and strategy rivals. It is true that deterrence is inherently unreliable. Unfortunately, as Clausewitz reminds us, "war is the realm of chance." One reason why deterrence has to be rescued from its current condition of semiretirement, is not so much because it offers great prospects of success, but rather because the leading alternatives suffer from severe limitations of their own. Military prevention/preemption is a necessary option as an occasional stratagem. However, it cannot possibly serve generally as the strategy of choice. In addition to military uncertainties, the domestic and international political demands on a preemptive strategy are much too onerous. If preemption can be only a minor, if still vital, player, the principal alternative would be a strategy of accommodation or appeasement. Positive inducements have their place in grand strategy, but there is nothing especially magical about their historical record of success (as our recent experience with North Korea illustrates all too clearly). Preemption and accommodation have roles to play, but if the burdens placed upon them are to be kept within sensible bounds, deterrence needs to handle much of the traffic.

Deterrence in Crisis.

The monograph provides a detailed review of the current crisis of deterrence. Key concepts are defined and explained. Those concepts are deterrence itself, compellence, dissuasion, inducement, preemption and prevention. Familiarity can breed contempt for the precise meaning of words. A surprisingly large number of people do not have a robust grip either upon how deterrence works (i.e., through a leadership deciding that it is deterred), or upon the distinction between preventive and preemptive action.

The monograph presents five broad points which capture much of the basis for the contemporary inclination to marginalize deterrence. First, many people have come to understand that deterrence is inherently unreliable. Those who demand certainty tend to be uneasy with a strategy that leaves a crucial power of decision with the adversary. Second, in retrospect the American theory of (nuclear) deterrence which underpinned, and sometimes guided, our strategic behavior in the Cold War, looks to have been nowhere near as magisterial as was believed at the time. Our theory, and attempted practice, of deterrence, assumed an effectively culture-free rationality. The American theory of deterrence was, and remains, exactly that, American. This fact can promote miscalculation on our part, given that American efforts to deter can succeed only if non-Americans choose to cooperate.

Third, the American theory and attempted practice of deterrence is prone to commit the cardinal error of confusing rationality with reasonableness. A recurring theme in U.S. public discourse is that of the rationality or irrationality of a particular foreign leadership. While genuinely irrational leaders do exist from time to time, meaning people who cannot

connect means purposefully with ends, their occurrence is so rare and their longevity in power is so brief, that they can be ignored. The problem is not the irrational adversary, instead it is the perfectly rational foe who seeks purposefully, and rationally, to achieve goals that appear wholly unreasonable to us. American strategic thinkers have long favored the fallacy that Rational Strategic Persons must think alike. More specifically, rational enemies are deterrable enemies. Fourth, deterrence has been marginalized because some of the more implacable of our contemporary adversaries appear to be undeterrable. Not only are their motivations apparently unreachable by the standard kind of menaces, but they lack fixed physical assets for us to threaten.

Fifth, the modern theory of deterrence was devised by people who were not, by and large, historians or close students of Clausewitz. The attempted practice of deterrence is subject to harassment, or worse, affected by events and influences that are best captured by Clausewitz's compound concept of "friction." Whether or not the American approach to deterrence is well-conceived, a great deal can go wrong on both sides of the relationship. Friction can occur at every level of conflict—policy, strategy, operations, tactics. Theoretical texts, as well as official statements of intent, on deterrence, understandably are all but silent on the subject of friction. This concept is notoriously difficult, if not actually impossible to operationalize. Even its author conceded that friction is a "force that theory can never quite define." In the real world of deterrence as policy and strategy, many things can, and frequently do, go wrong. One might conclude that military prevention or, if we are desperate, preemption, is the prudent path to take, since so much may hinder the prospects for success with deterrence.

In summary, the monograph points out the inherent unreliability of deterrence, the fragility of the theory with which we waged the Cold War, the continuing confusion of rationality with reasonableness, the likelihood that many of our new enemies will not be deterrable, and the working of friction to frustrate our best intentions.

Practical Measures.

So much for the bad news. The concluding section of the monograph advances the much better news that all is not lost on the deterrence front. Divided into "general measures" and "military measures," the study identifies and discusses "practical measures" whose adoption should help rescue deterrence from the discard file, or even from marginalization. As a general measure, the monograph advises that we should not "talk down deterrence." This recent official phenomenon has at least two unfortunate consequences: it provides fuel for those critics who wish to portray America as triggerhappy, and it overpersuades its exponents. Next, the monograph recommends that America look diligently for deterrable elements among, or vitally supportive of, our foes. I am not greatly impressed by the claim that our new enemies are undeterrable. Al Qaeda has many would-be martyrs in its ranks, but the organization is most careful of the lives of its key officers, and it functions strategically. It can be deterred by the fact and expectation of strategic failure.

The monograph advises respect for the working of general deterrence, or dissuasion, as contrasted with immediate (crisis-time) deterrence. Much of our success with deterrence leaves no footprints in the sand. America's military and economic reach and its reputation for firm behavior shape the international security environment. Putative foes are deterred without necessarily even being aware of the fact. They take account of America's guardianship behavior and restrict their ambitions accordingly. The study proceeds to advocate strongly the development of a more empirical theory of deterrence. America's theory of deterrence for the conduct of the Cold War was largely deductive in character and rested upon the convenient assumption that "one size of theory fits all." This was not true for the Soviet Union, and most assuredly it is not the case for the new adversaries of today and tomorrow. There is no adequate substitute for understanding the minds and the values they seek to maximize, that are targets for influence.

Much as war cannot be waged intelligently except in the light of the peace that it is supposed to herald, so deterrence cannot be attempted save in the context of a broad strategy of influence. War is not an end in itself, and neither is deterrence. The purpose of deterrence is to influence the decisions of others. Military threats comprise only one element in a strategy of influence. Deterrence should be most successful when it is supported by the adversary's knowledge, on the one hand that the United States is willing and able to take preemptive/preventive action, and on the other that promises of rewards for cooperative behavior are to be trusted. The monograph recommends that, contrary to much past American malpractice, the ideas of foreign adversaries should be taken seriously. After all, deterrence is all about influencing foreign minds. It would be difficult to exaggerate the importance of understanding the beliefs that dominate those minds, and which both shape the way the world is viewed, and serve as spurs to behavior.

It is necessary to demonstrate that terrorism fails. Brave people will sacrifice their lives for a cause, but what if nothing seems to change in the world? Al Qaeda has some distinctly terrestrial goals, and those can be denied by competent policies and strategies. Many of its officers and recruits should be discouraged by a growing realization that the Jihad they are waging is an exercise in futility. Finally, the monograph reminds its readers of the unfortunate fact that, by its high-profile opposition to the proliferation of weapons of mass destruction (WMD), the United States may be encouraging the perception that it can be deterred fairly easily. The law of unintended consequences has a way of ambushing what otherwise is sound policy. The more vehement the American opposition to proliferation, the greater the political and strategic value of such proliferation in the calculations of adversaries desperate for some way to secure asymmetric advantage. In its sensible quest to slow the pace of proliferation, America needs to be careful lest inadvertently it sends the message that even the most modest of WMD, especially nuclear capabilities, will reap wholly disproportionate rewards.

Under "military measures" to enhance deterrence, the monograph offers, and explains, four broad principles. It claims that force posture must be flexible and adaptable; that landpower is essential; that no particular military posture is uniquely deterring; and that U.S. landpower must be capable of contributing to strategic success in different kinds of

conflicts. The monograph concludes by itemizing the desirable or essential characteristics of U.S. landpower for it to perform satisfactorily in a deterrent role. If there is a guiding principle for this concluding section of the report, it is this judgment of Rear Admiral J. C. Wylie, USN: "The ultimate determinant in war is the man on the scene with a gun. The man is the final power in war. He is control. He determines who wins." Wylie's perceptive judgment speaks volumes to the matter of what enhances deterrence. His principle was never more in need of emphasis than it is today. Mission accomplishment can be threatened by risk-averse behavior for fear of casualties. Transformation, in practice, is more about exploiting technology than approaching war "in the round," let alone waging war with a view to winning the subsequent peace.

The following are the practical measures recommended in the report, both general and military.

Practical Measures for the Maintenance of Effective Deterrence.

General Measures.

- Don't talk down deterrence,
- Look for deterrable foes,
- Don't discount general deterrence, or dissuasion,
- Develop a more empirical theory of deterrence, Deterrence should be employed as part of a broad strategy of influence,
- Deterrence should be employed as part of a broad strategy of influence,
- Take the ideas of others seriously,
- Show that terrorism fails,
- Don't encourage the perception that the United States would be easily deterred by WMD.

Military Measures.

- Force posture must be flexible and adaptable,
- Landpower is essential,
- No particular military posture is uniquely deterring,

U.S. landpower must be capable of contributing to strategic success in different kinds of conflicts:

- Raids and brief interventions,
- Taking down rogue states,
- Holding off/defeating major regional powers,
- Irregular warfare,
- Peacekeeping/peacemaking,
- General dissuasion.

And U.S. landpower needs to be:

- Declassified,
- More Joint,
- More network-centric,
- Capable of heavy ground combat,
- Better able to use Special Forces,
- More focused on mission accomplishment than force protection,
- More skilled at civilian interface,
- More patient,
- More able to work with allies.

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Document No. 2. Keith B. Payne and Lawrence R. Fink, "Deterrence Without Defense: Gambling on Perfection," *Strategic Review* (Washington, DC: United States Strategic Institute, Winter 1989), pp. 25-40.

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In Brief

Classic theories of strategic deterrence in the nuclear age have focused on two basic requirements for an effective deterrent: the capability to inflict unacceptable damage and the manifest credibility of that threat. Those requirements, in turn, have been tested by a variety of quantitative "stability analyses" and efforts at decision-modeling that implicitly represent the political leader as rational "strategic man." Yet, the laboratory of history starkly demonstrates that the collision of nations does not lend itself to the informed, rational and coherent decisionmaking requisite to a durable efficacy of deterrence. Five case studies of historic conflict, including the recent Falklands War, illuminate the pervasive risk of deterrence failure—from acts of miscalculation, ignorance and/or irrationality, exacerbated by the impact on decisionmaking of domestic-political elements that are beyond the influence

of the other contending actors on the international stage. They empathize the imperative of an “insurance policy” of damage-limitation and direct defense.

On August 2, 1876, James Butler Hickok, better known as “Wild Bill” Hickok, was playing poker in Saloon Number Ten in Deadwood, Dakota Territory. Hickok, the “Prince of Pistoleers,” was a noted frontiersman and lawman—he was estimated to have killed up to 75 men in his efforts to enforce the law on the Frontier. Unfortunately, on this day, as Hickok sat playing poker, his back was toward an open door. While Wild Bill played, he was surprised by “Crooked Nose” Jack McCall who, influenced by strong drink, fired a fatal .45 bullet into the back of Hickok's head. Wild Bill had forgotten to protect himself by sitting with his back to the wall; an important precaution on the Frontier. Because Hickok held black aces and eights when he was murdered, that hand has become known in poker parlance as the “dead man's hand.”

Perhaps Wild Bill thought that his deserved reputation with a six-shooter would be sufficient to deter challenges that day; perhaps he was so distracted by the game that he neglected to take even elementary defensive precautions. Whatever the cause of Hickok's negligence, “Crooked Nose” Jack was undeterred by Hickok's reputation with a pistol. Jack was first acquitted but later hanged for Hickok's murder; that punishment, of course, could provide little consolation to Wild Bill.¹

The U.S. policy of strategic deterrence, based as it is entirely on offensive threats, is a powerful comfort to those who assume that the future will unfold in an orderly and predictable fashion. The question of deterrence failure—from an act of miscalculation, ignorance, stupidity, lack of caution and/or simple irrationality—has largely been avoided. If deterrence fails, the U.S. offense-only deterrent would leave us holding the “dead man's hand.” Of course, a devastating strategic retaliatory capability is available in the event strategic deterrence does fail. But as was the case for Wild Bill, inflicting a punitive sanction following Soviet attack would provide little comfort to the United States, which by then could have sustained as many as 165 million casualties.²

Psychological Mainsprings of Miscalculation

U.S. survival may depend on the reliability of deterrence in the event of acute crisis. This situation would be reasonable, even comforting—if deterrence were a reliable means of peacekeeping. Unfortunately, history demonstrates that the collision of states does not lend itself to the informed, rational and coherent decisionmaking and implementation required by the U.S. policy of strategic deterrence. The implications of that fact for U.S. policy are enormous and generally ignored.

¹ Muriel Wolle, *The Bonanza Trail* (Bloomington, IN: University of Indiana Press, 1955), p. 465.

² See the discussion of casualty figures from a largescale Soviet attack in U.S. Congress, Office of Technology Assessment, *The Effects of Nuclear War* (Washington, DC: U.S. Government Printing Office, 1979), pp. 94-95.

This defect in deterrence is based on more than the oft-noted possibility that leaders may behave irrationally and thereby be unaffected by the restraints of strategic deterrence. Rational leaders can also miscalculate as a result of a number of political and/or psychological factors, and thereby become involved in crisis, brinkmanship or war that an “objective” assessment would have led them to avoid.

One example of the type of psychological factors that appear to have led rational leaders to such miscalculation is the dental mechanism. Denial is a basic human psychological reaction to danger and involves “various degrees of nonperception, nonrecognition, nonunderstanding, or nonacceptance of certain realities in order to cope with otherwise unacceptable intrapsychic conflicts, feelings, or memories.”³ Detailed historical case studies demonstrate that this psychological defense mechanism has indeed been significant in miscalculations that resulted in the outbreak of crises and wars during both the nuclear and prenuclear age.⁴

Another common psychological process important in this regard has been labeled *bolstering*.⁵ This is the psychological tendency of decisionmakers who are compelled to choose from several unsatisfying courses to select the least miserable, minimize its possible negative consequences and exaggerate its positive attributes. The possibility for unwarranted overconfidence on the part of desperate leaders as a result of this psychological mechanism is obvious. As Richard Lebow observes, it blinds policymakers to the possible adverse consequences of their actions.⁶

As a result of psychological factors such as denial and bolstering, leaders in difficult situations often cannot engage in an “objective” assessment of information and expected consequences.⁷ Yet, for deterrence to function as envisaged in U.S. strategic policy, an objective assimilation of information and rational linking of actions to consequences is required. The lack of realism in deterrence theory in this regard led the Group for the Advancement of Psychiatry to conclude that the long-range prospects for deterrence are not good because “it rests on certain dubious psychological assumptions.”⁸ History bears out the problem: rational leaders (i.e., normally able to assess information, calculate costs and benefits, and link actions with consequences) have been led by psychological factors to

³ Group for the Advancement of Psychiatry, Committee on Social Issues, *Psychiatric Aspects of the Prevention of Nuclear War*, Report No. 57 (September 1964), p. 241. For basic discussions of psychological defense mechanisms such as repression and denial, see Willaim N. Dember and James J. Jenkins, *General Psychology: Modeling Behavior and Experience* (Englewood Cliffs, NJ: Prentice-Hall, 1970), pp. 659-678; and Lee Roy Beach, *Psychology: Core Concepts and Special Topics* (New York: Holt, Rinehart and Winston, 1973), pp. 187-198.

⁴ Peter Karsten, Peter D. Howell and Artis Frances Allen, *Military Threats: A Systematic Historical Analysis of the Determinants of Success* (Westport, CT: Greenwood Press, 1984), p. 21; Richard Ned Lebow, “Miscalculation in the South Atlantic: The Origins of the Falklands War,” in Robert Jervis, Richard Ned Lebow, Janice Stein, *Psychology and Deterrence* (Baltimore, MD: Johns Hopkins University Press, 1985), pp. 103, 119; and, in the same text, Richard Ned Lebow, “The Deterrence Deadlock: Is There A Way Out?” pp. 182-183.

⁵ See the discussion in, Richard Ned Lebow, *Between Peace and War* (Baltimore, MD: Johns Hopkins University Press, 1981), p. 110.

⁶ Lebow, “Miscalculation in the South Atlantic,” op. cit., p. 104.

⁷ Karsten, et al., op. cit., p. 8.

⁸ *Psychiatric Aspects of the Prevention of Nuclear War*, op. cit., p. 268.

miscalculate in situations that otherwise appear to have been susceptible to objective assessment, the result having been brinkmanship, crisis and war.

Pitfalls of Stability Analysis

Political factors can also interfere in the rational calculations and policy implementation assumed in deterrence theory. For example, critical domestic political problems can significantly affect leaders' decisionmaking regarding foreign policy: with the calculation of external realities such as the "strategic balance" becoming only one of multiple determinants of behavior. In addition, the flow of accurate information to leaders and the implementation of even well-calculated policy decisions coming from leaders can be more or less impeded by the unique political structure and players involved in each case. Each of these factors, in addition to differences in cultural values and norms can,⁹ and historically has, undermined the type of informed and methodical decisionmaking and implementation assumed in deterrence theory.

In most analyses of deterrence "stability" those factors that render deterrence unreliable are simply not taken into serious consideration.¹⁰ U.S. and Soviet forces are compared, strategic exchanges are modeled, and net war outcomes projected. If, based on the result of force exchange analysis, it appears that net costs (in terms of targets destroyed) would be unacceptable to the attacker, deterrence is assumed to be stable. If an acceptable level of damage is anticipated, or even a *net* gain in a crisis, then an incentive to strike is presumed and the condition is considered "unstable."

Such force-exchange analyses are employed to draw conclusions about the "stabilizing" or "destabilizing" effect of prospective changes in the U.S. strategic force posture. That is, conclusions are offered concerning how a change in strategic forces will effect the probability of war. The assumption in such analysis, often left unstated, is that the political leader will behave as the strategic equivalent of Adam Smith's "economic man." Leaders are assumed to be ready, willing and able to engage in rational cost-benefit calculations, and to make their decisions accordingly. They are assumed to be supremely well-informed, able to absorb information and implement cost-minimizing decisions under great stress, and cognizant of opponents' political interests, values, intentions and military capabilities. This assumption of the political leader as informed "strategic man" is a convenience; it allows conclusions about the probability of war to be drawn based almost exclusively on that which is relatively easy to do: "number crunching" of strategic force exchanges.

Stability analyses tend to reach reassuring conclusions about deterrence without taking into account the troubling factors that often dominate crisis, brinkmanship and war—

⁹ Karsten, et al., op. cit., p. 8.

¹⁰ Among the numerous examples, see Glenn A. Kent, Randall J. DeValck and David E. Thaler, *A Calculus of First-Strike Stability (A Criterion for Evaluating Strategic Forces)*, N-2526-AF (Santa Monica, CA: RAND Corp., June 1988); Paul L. Chazanowski, "Transition to Deterrence Based on Strategic Defense," *Energy and Technology Review*, January-February 1987, pp. 31-45; and Dean Wilkening and Kenneth Watman, *Strategic Defenses and First-Strike Stability*, R-3412-FF/RC (Santa Monica, CA: RAND Corp., November 1986).

political and psychological factors significant to the involved leaders and political systems. In effect, typical stability analyses make judgments about a decision-making process that is dominated by politics and psychology without taking politics or psychology into explicit account. Yet, it is these most human of factors, as is discussed below, that render deterrence unreliable.

War is quintessential politics; deterrence is a psychological function. And decisionmaking in both cases is subject to the idiosyncrasies of human behavior. Attempting to draw conclusions about stability via force-exchange calculations alone is akin to searching for lost keys under a street lamp because that is where the light happens to be readily available.

There is nothing wrong if, as an intellectual exercise, one posits “Countries A and B,” assumes that “strategic man” is at the helm of each, calculates force exchanges, and then draws conclusions about the stability of deterrence for countries A and B. The problem is that the practitioners of such stability analysis tend to forget that they have created a fictitious world and claim that their conclusions are valid for the real world of international relations. It should not be considered quibbling to note that there is no country “A” or “B” on the U.N. roster, and probably very few examples of “strategic man” at the helm of any real state. A large grain of salt should be taken with any stability analysis that so ignores the political-military context, and the politics and psychology of the specific characters and states involved, yet offers realworld policy prescriptions concerning specific force structures and the probability of war.

Serious students of deterrence have for years recognized the shortcomings of deterrence theory and warned against that which has become the common *modus operandi* for practitioners of stability analysis; i.e., the use of simplistic, idealized notions of deterrence theory to produce specific policy recommendations. As Alexander George and Richard Smoke warned:

The unitary actor, rationality, and the other assumptions and simplifications we have discussed are necessary ones to make manageable the logical tracing out of abstract [deterrence] theory. So long as it is kept clearly in mind that deterrence theory does have an abstract-deductive character, they are harmless enough.

The hazard begins to enter in when this simplified model is used in a normative prescriptive mode. . . . Here we wish to emphasize the many respects in which current deterrence theory fails to satisfy the prerequisites of normative-prescriptive theory. Methodologically, deterrence theory simply has not been adequately tested against historical experience.... Substantively, deterrence theory is seriously incomplete, to say the least, for a normative-prescriptive application.¹¹

Despite this fair warning, quantitative analyses of “stability” based on simplified deterrence theory continue to be churned out, and include quite specific policy

¹¹ Alexander George and Richard Smoke, *Deterrence in American Foreign Policy* (New York: Columbia University Press, 1974), pp. 82-83.

prescriptions about strategic forces and arms control. These analyses may be worse than misleading: they produce policy prescriptions based on analysis of a fictitious and idealized construct. Simplistic deterrence analyses have found at least one important audience: much of the expressed Congressional support for the Small ICBM, and opposition to the MX and SDI is based on such abstract stability analyses.

Questions of Deterrence Reliability

Since the mid-1970s a small number of academics in the fields of history, psychology and politics have moved deterrence analysis beyond simplistic deductive logic and force-exchange number crunching. These scholars have gone to the laboratory of history and discovered that leaders and governments often simply do not behave in the fully-informed and calculating manner assumed in simplified deterrence history.¹²

This conclusion, although tremendously important, has not yet found its way into the strategic policy debate in any serious way. There appears to be a built-in resistance to any fundamental questioning of U.S. deterrence policy. When all eggs are in a single basket, it is almost unthinkable to note that the basket has holes. Nevertheless, careful analysis of numerous historical case studies clearly demonstrates that deterrence, in a fundamental sense, is unreliable as a means of peacekeeping. It certainly is not as reliable as would need to be the case for U.S. strategic policy to be reassuring.

Classic discussions of strategic deterrence identify two basic requirements for an effective deterrent: the capability to inflict unacceptable damage and the manifest credibility of that threat. Yet, these well-known requirements are not sufficient for deterrence to “work.” There exists an entire set of often-ignored but necessary political and psychological conditions that must dominate the decisionmaking process on both (or all) sides if strategic deterrence is to function as envisaged. These include the following: leaders capable of relatively unbiased assessments of information and realistic linkage of actions to consequences; political systems permitting the implementation of rational decisions as policy; leaders who are well-informed and comprehend the intentions, interests, commitments and values of the opponent(s); leaders who focus on external factors (i.e., competing military capabilities) as the final determinant of decisions; and leaders who understand the military capabilities and consequences involved in their decisions, at least at a general level.

If one or several of these conditions is absent, there is no basis for assuming that the necessary cost-benefit calculations could be conducted, would determine policy and/or could have a useful deterrent effect. The existence and degree of these psychological-political conditions is difficult to identify and measure in any specific case—hence the

¹² This point was recognized as early as 1964 by the Group for the Advancement of Psychiatry. See *Psychiatric Aspects of the Prevention of Nuclear War*, op. cit., especially pp. 267-275.

overwhelming tendency to ignore them and base grand conclusions about deterrence on a piece of the puzzle that is quantifiable, i.e. force exchange computations.

If, by assuming away other important factors, deterrence is calculated only in terms of maintaining a nuclear “stick,” then it is not difficult to conclude that stability is relatively “easy” to achieve. At this simplistic level the maintenance of survivable nuclear forces is interpreted as an assurance of nuclear peace.

If the necessary political-psychological conditions identified above are taken into consideration, however, such sanguine conclusions about stability seem inappropriate. Indeed, strategic deterrence can be judged unreliable as a means of peacekeeping—almost regardless of the “strategic balance”—because the convenient assumption about the political decisionmaker as “strategic man” is not always consistent with historical experience.

The brief case studies that will be presented below are intended to present evidence from history to demonstrate that the assumption of “strategic man” is open to serious question. The case studies include crises from both the nuclear and prenuclear age: the Russo-Japanese War of 1904, the outbreak of World War I in 1914, the German invasion of the Soviet Union in 1941, the Japanese attack on the U.S. in 1941 and the Falklands War of 1982.

A Nuclear Dividing Line?

Before delving into those case studies, a myth needs to be confronted. Historical analysis of the prenuclear era may be considered to be of questionable relevance to considerations of modern deterrence: “nuclear weapons changed everything” is the common refrain. Yet, detailed historical studies, including numerous cases across centuries, conclude that the introduction of nuclear weapons has not radically altered the factors important to the success or failure of international threats.¹³ In addition, the psychological and political factors that make deterrence unreliable appear relatively unaffected by technological change. The advent of nuclear weapons has not altered the capacity of humans to make errors of judgment, to miscalculate, to behave irrationally, to be uninformed, to deny information inconsistent with desires, or to run great risks for great stakes. Albert Einstein observed that nuclear weapons have changed everything but our thinking.¹⁴ That, of course, is the point: if nuclear weapons have not changed humankind's thinking (and, one might add, emotions and psychological weakness), then a highly significant factor with regard to brinkmanship, crisis and war is unchanged.

¹³ Karsten, et al., op. cit., pp. 79-85. For an interesting discussion, see also John Mueller, “The Essential Irrelevance of Nuclear Weapons: Stability in the Postwar World,” *International Security*, Fall 1988, pp. 55-79.

¹⁴ Albert Einstein's statement was, “The unleashed power of the atom has changed everything except our ways of thinking. Thus we are drifting toward a catastrophe beyond comparison. We shall require a substantially new manner of thinking, if mankind is to survive.” The problem is, of course, that a “new manner of thinking” may not be within the human capacity to achieve.

Additionally, nuclear weapons may *not* have established the entirely unique condition that typically is thought to preserve nuclear peace—i.e., the possibility of the rapid destruction of society. Leaders and publics from the prenuclear era have either *perceived* that they faced possible “civilization-ending” military threats, or actually have faced such threats for their particular civilizations. These expectations did not prohibit conflict. Former British Prime Minister Harold MacMillan suggests this point in the following comment from his memoirs:

Among other deterrents of war in 1938, expert advice had indicated that bombing of London and the great cities would lead to casualties on the order of hundreds of thousands or even millions within a few weeks. *We thought of air warfare in 1938 rather as people think of nuclear warfare today.*¹⁵ [Emphasis added]

Frederick M. Sallagar, in *The Road to Total War* confirms MacMillan's nuclear analogy and adds the key point: “That these images, public and official alike, were based on a gross exaggeration of what airpower could do at the time is beside the point. They were what people expected to happen.”¹⁶ Sallagar notes that this mistaken view of airpower was at least partially responsible for Chamberlain's policy of appeasement.¹⁷

Politically elite circles prior to World War II thought of airpower as promising such utter mutual devastation that it would deter war. Indeed, the hope for mutual deterrence through threats of mutual destruction is not new to the nuclear age. J. M. Spaight demonstrates in the 1938 book *Air Power in the Next War* (from “The Next War” series edited by Liddell Hart) that conventional air attacks were thought to hold the prospect for mutual deterrence through “a horror unparalleled in the grim annals of war.” He elaborated:

The very magnitude of the disaster that is possible may prove to be a restraining influence. Because the riposte is certain, because it cannot be parried, a belligerent will think twice and again before he initiates a mode of warfare the outcome of which is incalculable. The deterrent influence may, indeed, be greater than that. It may tend to prevent not only raids on cities but resort to war in any shape or form...

At present air attack is regarded as a menace, a withheld thunderbolt, an impending calamity. All nations fear it. For that very reason it should be a deterrent influence against war.¹⁸

The second point, that leaders of the prenuclear age have indeed faced the prospect of utter destruction, is given evidence merely by pointing to the threat to Abydos by Philip V

¹⁵ Quoted in Uri Bialer, *The Shadow of the Bomber: The Fear of Air Attack and British Politics* (London: Royal Historical Society, 1980), p. 158.

¹⁶ Frederick M. Sallagar, *The Road To Total War* (New York: Van Nostrand Reinhold Co., 1969), p. 15.

¹⁷ Ibid.

¹⁸ J.M. Spaight, *Air Power in the Next War* (London: Geoffrey Bles, 1938), p. 126.

of Macedon, the destruction of Melos by Athens, the destruction of Carthage by Rome, and the utter destruction often left in the wake of the Mongols under Ghengis Khan. Commenting on the threat of the Great Khan, a leader of the Persian city of Bukhara noted: "Be silent: it is the wind of God's omnipotence that bloweth, and we have no power to speak."¹⁹

The common view that nuclear weapons and deterrence have made a strategic war "impossible" seems similar to the view made popular in Britain just prior to World War I by Norman Angell's *The Great Illusion*: then-modern economic conditions and interdependence had made war unthinkable for leaders behaving sensibly, because the costs, even to the victor, would be too high.²⁰ The 43 years of general peace, from the conclusion of the Franco-Prussian War on January 28, 1871, until August 1, 1914, lent credence to Angell's thesis. Similarly, the 43 years of general peace following World War II are repeatedly presented as "proof" that nuclear weapons have made war "unthinkable" and deterrence secure.

Professor Robert Jervis presents the modern nuclear variant of Angell's position by suggesting that the use of nuclear weapons would render the costs to the victor and vanquished similarly unacceptable. Consequently, Jervis observes that, "if decisionmakers are 'sensible,' peace is the most likely outcome."²¹ Angell's logic undoubtedly was true for most of the players in World War I, and Jervis' point is even more valid today, at least with regard to the superpowers. However, in the past the price to be paid in war did not ensure the peace. Are we now to believe the hopeful assessment that nuclear deterrence will preserve nuclear peace? The point, of course, is that, if the behavior of leaders is more than rational cost-benefit calculations, confident predictions of stability based on such calculations are likely, eventually, to be disappointed.

The following case studies are not meant to suggest that deterrence cannot "work." Indeed, deterrence may have prevented instances of brinkmanship, crisis and war on thousands of occasions that will remain unknown except to those leaders who were deterred. However, strategic deterrence based solely on offensive threat must be nothing short of foolproof, as the first failure would likely result in a holocaust.

The point is that deterrence should not be considered reliable as a means of peacekeeping, because those political factors that can lead to brinkmanship often are beyond U.S. control, and psychological factors leading policymakers to unwarranted miscalculations have not been expunged by the development of nuclear weapons. That is, the effective functioning of deterrence cannot be assumed regardless of how muscular or inoffensive is the U.S. nuclear deterrent and how clearly communicated its commitments.²²

¹⁹ Quoted in Karsten, et al., op. Cit., p. 70.

²⁰ Norman Angell, *The Great Illusion*, Fourth Edition (New York: Knickerbocker Press, 1913). Barbara Tuchman reports that Angell's book and thesis had an important impact on British thinking about the likelihood of war prior to World War I. *The Guns of August* (New York: Dell Publishing Co., 1962), pp. 24-25.

²¹ Robert Jervis, "The Political Effects of Nuclear Weapons: A Comment," *International Security*, Fall 1988, p. 81.

²² Some of the most important contributors to this area of deterrence research have summarized an element of this point nicely, "If one does not threaten the right target for the right reasons, it may not matter how well one does it." Karsten, et

The Russo-Japanese War

The war between Russia and Japan in February of 1904 might have been avoided at the bargaining table had it not been for a breakdown in the decisionmaking process of the Russian Government. Political infighting among the tsar's advisers and irrational judgments by the tsar himself resulted in a war that Japan did not desire and Russia did not expect.

Relations between Russia and Japan became strained in the late 19th Century as Russian expansion turned to the Far East. Through a series of maneuvers in Manchuria and Korea, Russia was rapidly extending its commercial and political influence in Manchuria and the Liaotung Peninsula. Although Russia's expansion was primarily of a commercial nature (e.g. the establishment of a private railroad through Manchuria, and the creation of a timber industry on the banks of the Yalu River), the Japanese government saw these ventures as a Russian scheme to absorb most of Manchuria and Korea. The occupation of Manchuria by Russian troops in 1900 and the leasing of Port Arthur and territory on the Liaotung Peninsula to Russia by the Chinese government caused further alarm in Tokyo.

In August of 1903, Japan opened a new round of negotiations with Russia to alleviate tension in the Far East. Japan offered what amounted to a recognition of Russian interests in Northern Manchuria in exchange for a recognition of Japanese interests in Korea. Seemingly oblivious to Japanese concerns, the tsar declared the disputed areas of Port Arthur and territory on the Liaotung Peninsula a viceroyalty of the Russian Empire. Furthermore, Russia stalled negotiations by delaying its response to the latest (and final) Japanese proposal. Frustrated at the negotiating table, the Japanese attacked the Russian fleet at Port Arthur on February 6, 1904.

Prior to the outbreak of hostilities, the tsar and his advisers were presented with ample warning of Japan's inclinations toward war. Through British and American loans, Japan had acquired a modern navy that rivaled the Russian one.²³ In addition, Japan had secured her position by concluding an alliance with Great Britain in January 1902 and by winning support from the United States through a reaffirmation of the "Open Door" policy. In January 1904, the Japanese ambassador made a final desperate plea for a response from the tsar through informal channels in order to avoid war.²⁴ Despite all of these indications,

al., op. cit., p. xii. Another key contributor to realistic deterrence research, Richard Ned Lebow, states the matter starkly: "Research to date indicates that the utility of deterrence is limited to a narrow range of conflicts: those in which adversarial leaders are motivated largely by the prospect of gain rather than by the fear of loss, have the freedom to exercise restraint, are not misled by grossly distorted assessments of the political military situation, and are vulnerable to the kinds of threats that would-be deterrent is capable of credibly making. Deterrence must be practiced early on, before an adversary commits itself to a challenge and becomes correspondingly insensitive to warnings that such a course of action is likely to result in disaster. Unless these conditions are met, deterrence will be ineffective or counterproductive," Richard N. Lebow, "Deterrence Failure Revisited," *International Security*, Summer 1987, pp. 212-213.

²³ Victor A. Yakhontoff, *Russia and the Soviet Union in the Far East* (London: Allen and Unwin, Ltd., 1932), p. 53.

²⁴ Count Sergei Iu. Witte, *Vospominaniia, Tsarstvovanie Nikolaia II*, Volume I (Berlin: Knigoizdatel'stvo "Slovo," 1922), p. 261.

the tsar was shocked by the Japanese attack on Port Arthur, and the Russian military in the Far East was woefully unprepared for war.

For its part, Tokyo communicated its intentions to halt further Russian expansion in the Far East through military force. Japanese efforts to deter Russia's aggressive foreign and commercial policies were not taken seriously in St. Petersburg for a variety of reasons, despite the fact that the Japanese threat was both clear and credible. Political intrigue and personal hostilities split the tsar's chief advisers on Far Eastern policy into separate factions. One faction, which included Minister of Finance Witte, Foreign Minister Lamsdorff and Minister of War Kuropatkin, argued that Russia should seek accommodation with Japan even if that meant relinquishing some of Russia's commercial ventures in the Far East.²⁵ The other faction, which included ex-cavalry officer and special adviser Alexander Bezobrazov and Minister of Internal Affairs Pleve, sought to continue Russia's eastern expansion regardless of Japanese concerns.

As Minister of Internal Affairs, Pleve evidently had his own agenda for pursuing a provocative policy in Korea. Following the outbreak of war in 1904, Pleve remarked to Kuropatkin: "Aleksei Nicholaevich, you don't know the internal situation of Russia. To suppress revolution, we need a small victorious war."²⁶ Bezobrazov's interests were financial. He was directly involved in Russian commercial enterprises (Yalu River timber concession) and stood to profit by further expansion in the area. By 1903, Bezobrazov and his allies had successfully excluded their opponents from the decisionmaking process and had insulated the tsar from opposing views.²⁷

Much of the blame also must fall directly on Tsar Nicholas, whose racist perceptions of the Japanese compelled him to discount the possibility of a Japanese attack.²⁸ When told of Japanese preparations for war by the German Kaiser in November of 1903, Tsar Nicholas replied that "there would be no war, because *he* did not wish it."²⁹ Nicholas simply could not conceive that Japan would dare attack Russia.³⁰ As a result of Russian indifference to Japanese interests, Tokyo saw two possible alternatives in January of 1904: attack Russia or lose its stake in Korea.

World War I

An examination of the European crisis in July and August of 1914 indicates that the First World War was ignited by a series of domestic crises and political misjudgments on the part of the belligerents. For both Austria-Hungary and Russia, the events of July 1914 were

²⁵ Count Sergei Iu. Witte, *The Memoirs of Count Witte*, translated and edited by Abraham Yarmolinsky (Garden City, NY: Doubleday, Page and Co., 1921), pp. 119-121.

²⁶ Witte, *Vospominaniia*, op. cit., p. 76.

²⁷ The growing dispute between the two groups culminated in the resignation of both Witte and Kuropatkin, although the tsar refused Kuropatkin's resignation. Lamsdorff was excluded from all affairs pertaining to the Far East. Ibid., p. 261.

²⁸ Lebow, *Between Peace and War*, op. cit., p. 76.

²⁹ *The Memoirs of Count Witte*, op. cit., p. 125.

³⁰ Ibid., p. 125.

heavily influenced by domestic politics. The Serbian Crisis did not develop from purely strategic concerns. Rather, Austria-Hungary's decision to punish Serbia for the assassination of Archduke Francis Ferdinand was based largely on domestic political considerations. The multi-ethnic Austro-Hungarian Empire, which had lost much of its military and political stature during the 19th Century, was taxed by internal difficulties caused, in no small degree, by nationalist movements within the empire. By making an example of Serbia, Austria-Hungary endeavored to gain respect from its own people as well as from the international community.³¹

Russia found itself in a similar position to that of Austria-Hungary. The Russian Empire had lost some of its stature as a great power following its defeat in the Russo-Japanese War and was shaken internally by the Revolution of 1905. Although the Russian economy had rebounded from these crises, the political power of the tsar and the imperial government was still in question. By not intervening on behalf of the Serbs, Tsar Nicholas would have relinquished his role as the champion of Slavs and Orthodoxy, thus further weakening his power and influence in his own country. In the words of Prince Lichnowsky, the German Ambassador to Great Britain:

The position of the Tsar in the eyes of his own people rests to some extent on the mystic nimbus which surrounds the Russian crown by virtue of its function as the Protector of Orthodoxy and Slavdom, and it is clear that the Tsar could not renounce this mission without forfeiting much of his prestige and, perhaps, even endangering his throne.³²

As a consequence of these internal pressures, Tsar Nicholas II saw no other recourse but to exercise his ancient duty as protector of the Orthodox Slavs in the Balkans (i.e. Serbia).

For Germany, a misguided strategy of brinkmanship drew it into the Serbian dispute and elevated a "local" crisis into a continental and, eventually, a World war. While Germany was prepared to fight a continental war against Russia and France, Germany's initial strategy during July of 1914 was not necessarily intended to provoke such a conflict. Rather, Germany had hoped to support its ally Austria-Hungary by keeping Russia at bay through brinkmanship. However, the German leadership failed to appreciate Russia's resolve to support Serbia and, therefore, regarded Russian threats of military intervention as "bluff." In a communiqué to Ambassador Lichnowsky during July of 1914, the German Secretary of State for Foreign Affairs, Gottlieb von Jagow, alluded to the improbability of Russian intervention:

To be sure, there will be some agitation in Petersburg, but, on the whole, Russia is not ready to strike at present. According to competent observation, Russia will be prepared to in a few years. Then she will crush us by the number of her soldiers;

³¹ M. Bogitshevich, *Causes of the War* (London: Allen and Unwin, Ltd., 1920), pp. 64-65; also Prince Karl Max Lichnowsky, "Delusions (notes made in 1915)," *Heading for the Abyss, Reminiscences by Prince Lichnowsky* (New York: Payson and Clarke, Ltd., 1928), p. 21.

³² *Ibid.*, p. 19.

then she will have built her Baltic Sea fleet and her strategic railroads.... In Russia this is well known, and they are therefore determined to have peace for a few more years yet.³³

Germany's assessment was based almost entirely on military and strategic considerations. By failing to appreciate the tsar's commitment to protect orthodox Slavs in the Balkans, Germany grossly underestimated Russia's determination to support Serbia.

German leaders committed a second fatal error in believing that Great Britain would not become involved in the conflict. This belief was the result both of miscalculation and miscommunication, precipitated by an irrational decisionmaking process. The political intrigues and power struggles within the German diplomatic service induced foreign service officers in Great Britain to report only that which the German Foreign Ministry wished to hear. For this reason, the majority of communiqués from London indicated that Britain was not likely to enter the war.³⁴

A closer examination of the British decision to enter the war has led some scholars to conclude that the final decision was also heavily influenced by domestic politics. According to K. M. Wilson, the two most influential leaders of the British Liberal Party (Prime Minister Asquith and Foreign Minister Grey) supported the British commitment to Belgian neutrality. A large majority in the Liberal Cabinet, although opposed to British involvement in a continental war, fell in behind Asquith and Grey rather than risk losing control of the government to the Conservatives in a coalition.³⁵ While it is incorrect to conclude that Great Britain was driven to war in 1914 by domestic politics, the concern by leading Liberal politicians for the future of their party (and themselves) in office, gave impetus in the British Government to a policy of immediate involvement that did not, at first, have even majority support.

It is not to argue that the events leading to war in 1914 were based on irrational decisions by the leaders of the Great Powers. For the most part, the leaders of Austria-Hungary, Russia, Germany and Great Britain had sound rationale for their actions. Nor is it to say that their decisions were devoid of strategic considerations. However, it is important to stress that many of the decisions in the summer of 1914 were motivated not entirely by "strategic" factors. As in the cases of both Austria-Hungary and Russia, domestic pressures played a significant role in determining the course of events. The balance of forces in Europe and other strategic considerations were only part of the equation. As a result, Germany alone could not succeed in deterring Russia from entering the conflict because it had little or no leverage in influencing the domestic problems that confronted the tsar.

³³ Max Montgelas and Walther Schucking, eds., *Outbreak of the World War, German Documents Collected by Karl Kautsky* (New York: Oxford University Press, 1924), No. 72, p. 132.

³⁴ Lebow, *Between Peace and War*, op. cit., pp. 125-126.

³⁵ K.M. Wilson, "The British Cabinet's Decision For War, 2 August 1914," *British Journal of International Studies*, Vol. 1, No. 2, July 1975, pp. 148-159.

Germany's initial contention that Great Britain would not enter the war also was not, in and of itself, irrational. It was, however, a miscalculation based on misperception and very poor information. Had German leaders a better understanding of British intentions, the British proposals in late July for Germany and Great Britain to mediate the dispute might have received more serious consideration in Berlin.³⁶

The German Invasion of the Soviet Union

The invasion of the USSR by the German Army on June 22, 1941, resulted in the defeat and retreat of Soviet forces. Although a variety of factors contributed to Germany's success, Stalin's orders to keep Soviet forces on a low level of alert was a leading cause of the disaster. Although the exact purpose behind Stalin's actions remains somewhat inexplicable from a strategic standpoint, it is generally accepted that the Soviet leader had realized that his country was not prepared for war in 1941 and sought to delay a conflict with Germany by remaining nonprovocative. In this manner Stalin hoped to remove any possible pretext for an attack.

Stalin's attempt to appease Hitler by appearing nonbelligerent conceivably could be regarded as a terrible miscalculation in strategy. However, the Soviet leader's refusal to acknowledge German war preparations in the face of irrefutable evidence must be considered irrational. During the spring of 1941, reports from Soviet military commanders at the border and from the Soviet Embassy in Berlin warned of an impending German invasion.³⁷ Not only were such reports ignored by Stalin, but Soviet commanders issuing them were reprimanded and denounced as provocateurs.

The breakdown of the decisionmaking process within the Soviet Army also contributed to the disaster of June 22. Any opportunity for the professional military to offer a serious challenge to Stalin's strategy had disappeared, along with the majority of experienced Soviet officers, during the Great Purge several years earlier. The prospect of facing a firing squad for disagreeing with the "Boss" was very real in the spring of 1941. From the perspective of a Soviet commander, it was far more prudent to accept the situation on the premise that Stalin had some hidden agenda or strategy that would later justify his actions than to run the risk of execution or imprisonment.³⁸ In some cases, Soviet commanders did take matters into their own hands by preparing for attack, but were forced by superiors to

³⁶ Great Britain presented four proposals between July 24 and 28 for Germany and Britain to mediate the crisis. Lebow points out that the proposals were likely rejected because Berlin did not believe Great Britain would enter the conflict. Lebow, *Between Peace and War*, op. cit., pp. 132-133.

³⁷ A report submitted by Soviet diplomats in Berlin to Moscow in May 1941 warned that a German attack against the Soviet Union could be expected at any moment. See Valentin Berezhkov, *A diplomaticheskoi missiei v Berlin 1940-1941 Tegeran 1943* (Tashkent: Izdatel'stvo "Uzbekistan," 1971), p. 52.

³⁸ Admiral N.G. Kuznetsov, "Pered voynoi," *Oktiabr'*, No. 11, 1965, p. 147.

remand their orders.³⁹ For all practical purposes, Stalin's purges had destroyed the decisionmaking apparatus of the military.

What lessons have been drawn from the disaster of 1941? Soviet military leaders have argued that Hitler might have been deterred from invading in June of 1941 if the USSR had been better prepared for an attack. In the words of the former Commander of the Soviet Navy, Admiral Kuznetsov:

... For every step taken by Fascist Germany to prepare for war, a responsive measure was needed. The "Barbarossa" plan was worked out in detail and gradually implemented. But seeing that there would be no surprise and the attack would be met by a harsh and prepared rebuff, Hitler might have postponed the implementation of this plan and might not have given the order to attack, just as he had not given the order to carry out operation 'Sea Lion.' An invader is halted and sobered not by the other side's passivity, but by its resolve and readiness to resist.⁴⁰

That a prepared Soviet military would have deterred Hitler from attacking is questionable. Yet, there is no doubt that maintaining a high state of military alert was the only rational policy for the Soviet Union in June of 1941: at best, Hitler would have called off "Barbarossa"; at worst, the Soviet Armed Forces would have fared better during the initial German assault.

In a more recent review of Stalin's strategy, Deputy Chief of the Soviet General Staff, General Colonel Makhmut A. Gareyev, has drawn some conclusions regarding crisis policy that may be indicative of the current Soviet approach to strategic decisionmaking. According to Gareyev, a multiplicity of factors must be accounted for when developing and assessing state policy:

...The harsh lessons of the past testify to the fact that abstract policy in a pure form does not and cannot exist. Policy, including foreign policy, can be vital only if it takes into account the entire set of circumstances of a situation: international, economic, ideological, and, not least of all, interests for the resolution of defense problems.⁴¹

Gareyev notes that the military balance is but one component of the international situation at any given time, and that other variables, such as politics, economics and ideology must be factored into the equation. Furthermore, Gareyev notes that "abstract policy" devoid of other considerations is not viable in the real world.

³⁹ For example, the commander of the Baltic Military District was dressed down for the ordering a blackout prior to the German invasion and war forced to rescind his order. See Marshal Nikolai N. Voronov, *Na sluzhbe voennoi* (Moscow: Voennoe Izdatel'stvo, 1963), p. 173.

⁴⁰ Kuznetsov, op. cit., p. 171.

⁴¹ General-Colonel Makhmut A. Gareyev, "Velikii Oktiabr' i zashchits Otechestva," *Oktiabr'*, No. 2, 1988, p. 178.

The Japanese attack on Pearl Harbor

The Japanese surprise attack against the United States on December 7, 1941, is astounding if one considers the apprehension with which Japan's military leaders accepted its implementation. Many of Japan's most prominent naval commanders predicted that a war with the United States most probably would end in disaster for Japan. Yet the same commanders planned and conducted the attack on Pearl Harbor, thus expediting their own grim prophecies of a Japanese defeat.⁴²

Why did Japan initiate a war that it had little hope of winning? In hindsight, the entire Japanese scheme appears reckless, irrational and devoid of any serious long-term strategic considerations. Most assuredly, the military might and resources of the United States would overcome those of Japan.

In fairness to the Japanese leaders, it is important to point out that their strategy called for a war of limited duration culminating in a negotiated peace with the United States. In this way, Japan believed, it would be possible to resolve its differences with the United States while preserving most of Japan's Pacific empire. Furthermore, Japanese leaders believed that the only alternative to war with the United States was the rapid decay of Japanese power and influence in the Pacific. Although war with the United States was considered a desperate gamble, the leaders of Japan saw it as their only option. Given this scenario, the Japanese plan, although risky, was not irrational.

The Japanese strategy was, however, doomed by a miscalculation regarding U.S. resolve to fight a protracted war. The plan hinged on the erroneous premise that the United States would lose its determination to continue the war and negotiate a peace more or less favorable to Japanese interests within a year's time.⁴³ In reality, the Pearl Harbor attack mobilized strong popular support for the war effort in the United States and destroyed any possibility of conducting a short, limited war with the United States. That the United States would lose its will to fight even after Pearl Harbor was a fatal miscalculation for Japan, which transformed a desperate strategic gamble into certain defeat.

The Falklands War

The propensity for miscalculation and miscommunication between two countries during a crisis still exists in the nuclear age. The Falklands War of 1982 illustrates how a series of miscommunications and miscalculations between a nuclear power (Great Britain) and a nonnuclear power (Argentina) can elevate a domestic crisis into a major conflict.

As in many of the previous case studies, domestic politics was an important catalyst for the Falklands War. The Argentine junta, which was suffering from rapidly declining popular

⁴² Admiral Yamamoto, the architect of the Pearl Harbor attack, had little confidence in a Japanese victory and warned that Japan should avoid a war with the United States. Naval Chief of Staff Admiral Nagano also believed that the possibility of Japanese victory was remote. See Gordon W. Prange, *At Dawn We Slept* (New York: McGraw Hill, 1981); pp. 9-10; also John Toland, *The Rising Sun* (New York: Random House, 1970), p. 86.

⁴³ Scott Sagan, "Origins of the Pacific War," *Journal of Interdisciplinary History*, Spring 1988, pp. 914-917.

support, found the recovery of the Falkland Islands to be a political rallying-point and an important diversion from a failing economy.⁴⁴ It has even been suggested that the rise of General Galtieri to power was conditional upon his commitment to recover the Falkland Islands before January 1983, the 150th anniversary of British control.⁴⁵ The junta's strategy was rational from a domestic political perspective. Unfortunately, Great Britain had no chance to alter that perspective, since it was beyond the realm of foreign policy and strategic considerations.

The crisis was further exacerbated by miscommunication between Great Britain and Argentina. For its part, Great Britain did not make clear to Argentina its intentions to defend the Falklands with military force and thus failed to exert sufficient influence over the strategic calculus of the Argentine plan. For many years, Great Britain showed little interest in the Falklands and appeared to be in the process of removing its strategic and political ties to the islands.⁴⁶

Had the British Government displayed a strong commitment to the Falklands during the early stages of the crisis, Argentina may have been deterred from invading. However, a forceful British response occurred too late to alleviate the crisis.⁴⁷ Argentine invasion plans already had been set in motion, and any reversal in policy at this point would have amounted to political suicide for the junta.

Consequently, the Argentine leadership did not regard the seizure of the Falkland Islands to be a particularly risky policy. In the opinion of junta leader General Galtieri:

... Though an English reaction was considered a possibility, we did not see it as a probability. Personally, I judged it scarcely possible and totally improbable. In any case, I never expected such a disproportionate answer. Nobody did. Why should a country situated in the heart of Europe care so much for some islands located so far away in the Atlantic Ocean; in addition, islands which do not serve any national interest? It seems so senseless to me.⁴⁸

The junta committed a second crucial miscalculation in presuming that the United States would not support Great Britain. It was hoped that the United States would remain neutral or would dissuade the British from using military force to recover the islands.⁴⁹ These miscalculations ultimately resulted in a costly and bloody war and political death for Galtieri and the Argentine junta.

⁴⁴ Toward the end of the conflict, General Galtieri vehemently denied that the junta's decision to seize the Falklands was motivated by political and economic problems in Argentina. He did admit, however, the action "helps to unify the Argentinas and that it does more and more." Oriana Fallaci, "Galtieri: No Regrets, No Going Back," *The Times*, June 12, 1982, p. 4; see also Max Hastings and Simon Jenkins, *The Battle for the Falklands* (New York: W.W. Norton and Co., 1983), p. 48.

⁴⁵ *Ibid.*, p. 46.

⁴⁶ *Ibid.*, p. 47.

⁴⁷ "Falkland Islands—The Origins of a War," *The Economist*, June 19, 1982, p. 43.

⁴⁸ Fallaci, *op. cit.*, p. 4.

⁴⁹ *Ibid.*, p. 4; Alexander Haig, *Caveat* (New York: Macmillan and Co., 1984), p. 291.

Lessons of the Case Studies

These case studies demonstrate several important points. First, as the events surrounding August 1914 and the invasion of the Falklands demonstrate, domestic political problems, whether of particular leaders or the political system, can be the wellspring for brinkmanship, crisis and war. Would Austria-Hungary have reacted so strongly to the assassination of Archduke Ferdinand if its nationalities problem had not appeared so perilous? Would General Galtieri and the junta have invaded the Falklands if they had not faced such difficult domestic political problems?

Such contributory causes of brinkmanship are unlikely to be assuaged by foreign efforts to ensure “stability.” They tend to be obvious and deep rooted or hidden from foreign eyes, and therefore invulnerable to foreign efforts.⁵⁰ This point is not simply of passing interest. The United States has virtually no power significantly to effect the Soviet domestic “nationalities problem” or the Soviet “problem of empire,” and only limited capabilities to affect chronic Soviet economic stagnation. Yet, these are the kinds of problems that might actually compel a future Soviet leadership to see foreign initiative and brinkmanship as the “least miserable option.”⁵¹

Second, brinkmanship and the escalation to war can result from the very human political-psychological factors of misjudgement, miscalculation, misperceptions, lack of information and/or irrationality. Each of the case studies discussed above appears to reflect some element of these factors in the events leading to war. The degree of significance of these factors individually varies in each particular case. Yet, it is difficult to escape the conclusion that singularly or combined they were significant.

Would Tsar Nicholas II have compelled war with Japan if he had not held irrational-racist views of the Japanese, and if his advisers had not been pursuing their own commercial and political agendas? Would Germany have pressed Austria-Hungary toward aggression in 1914 if it had accepted Lichnowsky's view that Britain would fight or understood the Tsar's resolve to protect Serbia? Would Japan have attacked Pearl Harbor if it understood the unifying effect the attack would exert on the American people? Would Britain have reacted so passively to the brewing crisis over the Falklands if it understood the deadly impact that such passivity signaled to the junta?

Although it is impossible to know the answer to such questions, it seems in every case to be “probably not.” The conclusion appears to hold: factors that are generally omitted from “stability analyses,” and are difficult, perhaps impossible, to predict or treat, can contribute significantly to brinkmanship, escalation and war.

The point here is not only that deterrence might fail because a less than fully rational leadership could calculate that nuclear war would be worth the cost.⁵² Equally disturbing is

⁵⁰ Lebow, “The Deterrence Deadlock: Is There A Way Out?” op. cit., p. 184-189.

⁵¹ Herman Kahn often made the point that the only incentive that could drive either Superpower to choose strategic nuclear war would be a situation where war was perceived to be “the least miserable option.”

⁵² This troubling possibility was well presented by Fred Iklé in “Can Nuclear Deterrence Last Out The Century?” *Foreign Affairs*, January 1973, pp. 167-285.

the possibility that fully rational leaders could fail to identify an opponent's firm commitment, or be driven by domestic considerations or psychological tendencies to ignore unwanted calculations, or that the structure of a political system could block implementation of rational decisionmaking during a crisis. The prospect for deterrence failure stems from many more than the canonical possibilities of accident, irrationality or a close calculation that the balance of forces gives an incentive to attack. Yet, U.S. deterrence policy addresses only the last of these possibilities.

Implications for Deterrence

The implications of the above discussion for U.S. strategic policy are fundamental. Policymakers should not be willing to believe the convenient notion that the existence of survivable strategic nuclear forces assures nuclear peace.⁵³ Any such assurances cannot be credible. And force-exchange calculations alone cannot be the basis for conclusions about stability, except at highly abstract levels that alone ought not to be considered an adequate basis for specific policy prescriptions.

Contending prescriptions for U.S. strategic deterrence policy—ranging from a “warfighting” to a “minimum” deterrent—often are debated in highly conceptualized terms as being universally more or less stabilizing.⁵⁴ Each side tends to criticize the other for endorsing a “destabilizing” policy position. However, the advantages for stability of one over the other in actual crisis application, if that could be measured, almost certainly would be affected significantly by immediate political-psychological conditions which are difficult to predetermine.

In addition, the U.S. strategic policy of deterrence, whatever the details and label, is dominated by offensive forces. The significant reduction of societal damage in the event deterrence fails (or is irrelevant) has not been a serious U.S. capability for decades. For the purposes of deterrence the United States has pursued the capability to unleash a nuclear holocaust, but it has virtually no capacity to survive that holocaust. Yet, as was noted above, deterrence theory does not even address some possible causes of brinkmanship, crisis and war. The U.S. strategic policy of deterrence is fundamentally unreliable, but makes no provision for that fact. The danger in this approach to strategic policy exists whether the United States follows a “warfighting” or “minimum” deterrence policy. Either virtually ensures unimaginable levels of destruction if deterrence fails, and both overlook some of the processes that might lead to deterrence failure.

It might be objected that U.S. policy does make provision for the failure of deterrence. It is true that the decades-long trend toward flexibility and limited options in U.S. strategic

⁵³ This view was reflected at a Student Pugwash conference held at the University of California at Berkeley, March 6-7, 1982. Dr. Richard Garwin equated the certainty of deterrence with the law of gravity. This view is as reassuring as it is dangerous. As A.J.P. Taylor observed concerning the historical experience of deterrence, “A deterrent may work ninety-nine times out of a hundred. On the hundredth time it produces catastrophe.”

⁵⁴ For a recent useful review of the contending approaches to strategic deterrence, see Philip Bobbitt, *Democracy and Deterrence: The History and Future of Nuclear Strategy* (New York: St. Martin's Press, 1988), especially pp. 134-150.

employment policy reflects an intent to restore deterrence if it initially fails. Yet, such plans to restore deterrence are subject to the same vulnerabilities that could cause its failure. If strategic deterrence has failed as a result of a lack of caution, miscalculation, ignorance, irrationality, etc., there is little reason for confidence that it could then be restored short of high levels of destruction. In effect, the United States relies exclusively on the effective functioning of deterrence to cope with the possibility that deterrence might fail.

In addition, if deterrence fails there is little chance that U.S. counterforce systems could usefully limit societal damage. Given existing and likely U.S. and Soviet strategic forces, it is clear that U.S. counterforce capabilities could not, even under optimistic conditions, significantly reduce damage to the U.S. homeland should the Soviets decide to inflict it.

The level of “general stability” in U.S.-Soviet relations may be such that the risk of deterrence failure is very low—“general stability” stemming from the mutual lack of net incentives to provoke conflict based primarily on non-military factors and regardless of the strategic balance.⁵⁵ This point demonstrates the critical importance of the political context to questions of stability. Despite the fact that the United Kingdom and France have the nuclear capability to annihilate U.S. society, it is reasonable not to worry much about the possibility of deterrence failure vis-a-vis those countries. If U.S.-Soviet political relations reach that level of amity, concern about the unreliability of deterrence would be minimized. However, while U.S.-Soviet relations typically are sufficiently cautious to discourage willful acts of severe provocation, the notion that the possibility for U.S.-Soviet brinkmanship and crisis is a thing of the past is unduly optimistic.

The Imperative for Strategic Defense

The above discussion leads to at least one important conclusion: the ideal U.S. strategic policy would integrate the goal of deterrence with damage-limitation. If the outbreak of war cannot be controlled with greater precision than now appears possible, the United States should pursue those measures that could contribute to surviving the event. Unfortunately, U.S. strategic policy has purposefully rejected damage-limitation as a serious goal. Indeed, the ABM Treaty of 1972 codified the U.S. view that mutual vulnerability could serve as the basis for deterrence stability.⁵⁶

It is this rejection of damage-limitation as a goal worth pursuing that equates to Wild Bill Hickok's choice of seats at the poker table. Hickok's neglect of minimum precautions contributed to his demise; U.S. strategic policy reflects the same trust that events will unfold predictably and without surprise. It *may* be that significant damage-limitation will be illusory for technical reasons. But to the extent that the goal of damage-limitation has purposefully been set aside in deference to an approach to deterrence defined by mutual vulnerability, defenselessness ceases to be merely an unalterable condition and has

⁵⁵ See the discussion in Mueller, *op. cit.*, pp. 69-72.

⁵⁶ The treaty states that ABM systems were to be limited, in part, because such limitations “would lead to a decrease in the risk of outbreak of war involving nuclear weapons.”

become a policy choice.⁵⁷ In an unpredictable international system ultimately characterized by anarchy, choosing to remain vulnerable because of confidence in deterrence is to leave one's back exposed and deliberately to deal oneself the dead man's hand.

The usual argument that damage-limitation must be rejected because defenses are "destabilizing" and their absence is "stabilizing" misses the mark. From the late 1960s to the current SDI debate, very simplistic deterrence considerations have concluded that significant defenses and deterrence are largely incompatible.⁵⁸ However, even within the logical confines of simplified deterrence theory, it is not clear that defenses need be inconsistent with stability.⁵⁹ Complicating any Soviet first-strike planning with U.S. active defenses can be viewed as compatible with traditional deterrence requirements. But more to the point, because the reliability of deterrence is inherently uncertain regardless of U.S. posturing, the preparation for damage limitation ought not to be sacrificed on the basis of an "anti-defense" approach to deterrence. This conclusion obviously offers strong support for the Strategic Defense Initiative (SDI), particularly the original version with its greater emphasis on societal protection. Because deterrence is unreliable, the broad goal of damage-limitation and SDI are vital.

Ballistic missile defense (BMD) would be essential to the prospect for useful levels of damage-limitation.⁶⁰ Unfortunately, the Reagan Administration openly justified the SDI more on the basis of maintaining deterrence i.e., that BMD would "complicate" any Soviet first-strike planning, than on societal protection. The Administration "led with its chin" in

⁵⁷ That the United States has, in fact, set aside damage-limitation in deference to a particular approach to deterrence was discussed in Iklé, op. cit., pp. 268-270, and has often been formally acknowledged. For example, in Harold Brown's words, "In the interests of stability, we avoid the capability of eliminating the other side's deterrent, insofar as we might be able to do so. In short, we must be quite willing—as we have been for some time—to accept the principle of mutual deterrence, and design our defense posture in light of that principle, *Department of Defense Annual Posture Statement for FY 1980* (Washington, DC: U.S. Government Printing Office, January 29, 1979), p. 61.

⁵⁸ From the early ABM debate, see, for example, Richard Garwin and Hans Bethe, "Anti-Ballistic Missile Systems," originally published by *Scientific American*, March 1968, reprinted in *Arms Control: Readings from Scientific American*, with introduction by Herbert York (San Francisco: W.H. Freeman and Co., 1973), pp. 165-167; George Rathjens, "A Breakthrough in Arms Control," and W.K. Panofsky, "Roots of the Strategic Arms Race," both in *Science and Public Affairs*, Vol. 27, No. 6, June 1971, p. 5 and p. 20, respectively. During the SALT I hearings Gerard Smith told Congress that the mutual vulnerability promoted by BMD limitations would make a first strike "inconceivable." See *U.S. Senate, Committee on Armed Services, Military Implications of the Treaty on the Limitations of Anti-Ballistic Missile Systems and Interim Agreement on Limitations of Strategic Offensive Arms, Hearings* (Washington, DC: U.S. Government Printing Office, 1972), p. 286. The more recent SDI debate has witnessed similar simplistic discussions of deterrence and defense. See, for example, U.S. Congress, Office of Technology Assessment, *Ballistic Missile Defense Technologies* (Washington, DC: U.S. Government Printing Office, September 1985), pp. 101-136; Union of Concerned Scientists, *Space-Based Missile Defense* (Cambridge, MA: March 1984), pp. 79-84; Strobe Talbott, "The Case Against Star Wars Weapons," *Time*, May 7, 1984, p. 82; and Sidney Drell et al., "Preserving the ABM Treaty: A Critique of the Reagan Strategic Defense Initiative," *International Security*, Fall 1984, p. 81.

⁵⁹ See, for example, the discussions in Wilkening, Watman, op. cit., pp. 21-38; Chrzanowski, op. cit., pp. 39-44; Roy Radner "Model of Defense-Protected Build-Down," *Strategic Defense and Arms Control*, Alvin M. Weinberg and Jack N. Barkenbus, eds. (New York: Paragon House Publishers 1988), pp. 111-142; and in the same book, Alvin M. Weinberg, "Speculations on a Strategist's Perspective," *Ballistic Missile Defense*, Ashton Carter, David Schwartz, eds. (Washington, DC: Brookings Institution, 1984), pp. 42-46; Donald G. Brennan, "The Case For Population Defense," *Why ABM?*, Johan Holst, William Schneider eds. (New York: Pergamon Press, 1968), pp. 100-106.

⁶⁰ It may also require a combination of arms reductions, civil defense, air defense and antisubmarine warfare.

this regard. It is not clear that BMD is necessary to provide the retaliatory threat required by U.S. deterrence policy—Soviet first-strike planning is highly complicated even in the absence of BMD. Yet, the *weakness* of deterrence fully justifies damage-limitation as a national security goal and the SDI as a means of pursuing that goal.

In addition, it may be the role BMD could play for damage-limitation that provides a unique contribution to deterrence. Historical case studies demonstrate the importance of credibility in the functioning of deterrence.⁶¹ A capability for damage limitation may be necessary in many circumstances to provide the U.S. deterrent with the necessary level of credibility. By reducing the risk that the United States would confront in a crisis, damage-limitation might lessen the chance that an opponent could hope to paralyze American leaders with the fear of escalation, and thereby escape the U.S. deterrent threat. Consequently, strategic defense may have a unique role in support of the traditional norms of deterrence, but that role need not be separate from a goal of damage-limitation.

In summary, this brief review of deterrence theory and history suggests that the offense-dominated U.S. policy of strategic deterrence has some critical deficiencies. Historically, a primary cause of brinkmanship has involved domestic political problems that are largely immune to external correction and are “outside” deterrence theory. Consequently, the United States may have little or no control over the factors that could lead the Soviet Union toward brinkmanship. In addition, the U.S. theory of strategic deterrence simply is not based on a realistic assumption about political decisionmaking. It “rests on certain dubious psychological assumptions,” and ignores important psychological mechanisms such as *denial* and *bolstering* that facilitate miscalculation. And, the advent of nuclear weapons does not appear to have corrected these human psychological “weaknesses.” Brinkmanship and crisis outside of U.S. control could compel the United States into a conflict for reasons that are not accounted for in deterrence theory. Such a chain of events may be of low probability; but U.S. deterrence policy does not even address the possibility, and the result could be catastrophic.

It is not apparent how this deficiency in a policy of strategic deterrence can be accommodated except through the “insurance” of a damage-limitation capability. This need for the integration of deterrence and damage-limitation goals underscores the value of BMD. It will be unfortunate if official discussions of the SDI program continue to move away from the prospective BMD role for damage limitation. Therein appears to reside the unique contribution of strategic defense to deterrence, both in the hope for its success and the possibility of its failure. The United States needs the possibility of relief in the event deterrence fails or is irrelevant, and SDI could be a long stride toward that possibility.

⁶¹ Karsten, et al., op. cit., pp. 13, 71-83.



IN MEMORIAM

With the passing of Senator Jon L. Kyl in September 2026, America lost a giant. Senator Kyl served four terms in the House before becoming a senator in 1994 and retiring in 2013 as Senate Minority Whip. He returned to the Senate for four months in 2019 following Senator John McCain's passing and dedicated that time to promoting the findings of the Commission on the National Defense Strategy and strengthening the U.S. military. Amid his many legislative accomplishments, particularly in the area of national security, his interest in and understanding of defense issues and threats to U.S. interests remained unparalleled in Congress.

This section features written testimony that Senator Kyl presented to the Senate Armed Services Committee on the findings of the Congressional Commission on the Strategic Posture of the United States, a bipartisan commission that Senator Kyl co-chaired with former National Nuclear Security Administration Principal Deputy Administrator Madelyn Creedon. His two other featured speeches concern the Comprehensive Nuclear-Test-Ban Treaty, which he helped soundly defeat in 1999. These speeches continue to inspire: Senator Kyl's sound assessment of issues pertaining to the nuclear weapons complex, his clear-eyed analysis of adversaries and how they use arms control to restrain the United States, and his willingness to engage in substantive arguments on the merits rather than through emotion will be sorely missed.

Document No. 1. Madelyn R. Creedon and Jon L. Kyl, Written Testimony for the Senate Armed Services Committee "Findings of the Congressional Commission on the Strategic Posture of the United States," October 19, 2023.*

Preface to the Final Report

The militarily troubling and increasingly aggressive behaviors of Russia and China over the past decade led Congress to direct a review of the strategic posture of the United States, including nuclear weapons policy, strategy, and force structure.¹ We have the privilege to serve as the chair and vice chair of this second Strategic Posture Commission (SPC).

Much has happened since the first SPC released its report in 2009.² China's rapid military build-up, including the unprecedented growth of its nuclear forces, Russia's diversification and expansion of its theater-based nuclear systems, the invasion of Ukraine in 2014 and subsequent full-scale invasion in February 2022, have all fundamentally altered the geopolitical landscape.

As a result of China's and Russia's growing competition with the United States and its Allies and partners, and the increasing risk of military conflict with one or both, as well as

* Available at https://www.armed-services.senate.gov/imo/media/doc/kyl_joint_statement.pdf.

¹ Congress established the parameters of the review and a Strategic Posture Commission to carry it out in the National Defense Authorization Act for Fiscal Year 2022, Pub. L. 117-81, 135 Stat. 2126, 117th Cong.

² William J. Perry and James R. Schlesinger, *America's Strategic Posture: The Final Report of Congressional Commission on the Strategic Posture of the United States* (United States Institute of Peace, 2009).



concerns about whether the United States would be prepared to deter two nuclear peers, Congress determined it was time for a new look at U.S. strategic policy, strategy, and force structure.

The first SPC had a charge like ours: “to conduct a review of the strategic posture of the United States and to make a recommendation on how to move forward.”³ The vision of a world without nuclear weapons, aspirational even in 2009, is more improbable now than ever. The new global environment is fundamentally different than anything experienced in the past, even in the darkest days of the Cold War. Today the United States is on the cusp of having not one, but two nuclear peer adversaries, each with ambitions to change the international status quo, by force, if necessary: a situation which the United States did not anticipate and for which it is not prepared.

While the risk of a major nuclear conflict remains low, the risk of military conflict with either or both Russia and China, while not inevitable, has grown, and with it the risk of nuclear use, possibly against the U.S. homeland.

We started our work with extensive intelligence briefings to understand this new, rapidly changing security environment. These briefings underpin our conclusion that as a nation we need to urgently prepare for the new reality, and that measures need to be taken now to deal with these new threats. We believe that prompt actions are needed to provide future decision-makers viable options to credibly deter conflict. Being unprepared for the reality of two nuclear peers, who are dedicated to and focused on undermining the post-Cold War international order that has served the United States and its Allies and partners so well, is, in our view, not an option.

We had extensive discussions and briefings on the problems we face as a nation, including workforce shortages, supply chain limitations, and inadequate physical, scientific, technical, and experimental infrastructure at the Department of Defense (DOD) and Department of Energy/National Nuclear Security Administration (DOE/NNSA). These shortcomings resulted from years of inattention and if not addressed promptly, will continue to limit the U.S. ability to prepare and respond to the new challenges.

As we discussed this new normal, we also concluded that the United States does not truly have, but must commit to, a “whole-of-government” approach to be more efficient and effective.

Keeping up with technology is also a challenge. Whereas in the past, when U.S. government research was uniformly on the cutting edge, that role has shifted to the private sector in many areas. As a result, the DOD and DOE/NNSA will have to change traditional procurement practices to work effectively with the private sector to rapidly develop and deploy new cutting-edge technology.

Allies and partners are important as together we are stronger. Greater cooperation, coordination and integration with our Allies and partners is essential to deter conflict and prosper economically. National leaders must communicate to U.S. citizens the benefits and

³ Ibid, Chairman’s Preface.

importance of U.S. global leadership, Allies and partners and extended deterrence, if they are to gain the support of the American people for the associated policy and costs.

Our review sought to address and respond to this new, more dangerous, and more competitive environment, while looking for ways to improve strategic stability and reduce the risk of conflict. We know that this will be difficult on many levels, but we believe that our recommendations can help shape needed future strategy and posture decisions.

For the most part the Commission deliberately avoided making specific force structure recommendations; instead, we identified capabilities beyond the existing program of record (POR) that will be needed. We believe it is appropriate to leave specific material solution decisions to the Executive Branch and Congress. We were clear, however, that the nuclear force modernization POR is absolutely essential, although not sufficient to meet the new threats posed by Russia and China, and that the elements of the POR should be completed on time, expedited wherever possible, and expanded as needed.

We also found that adopting new technologies faster, and working with smaller innovative companies will be necessary to support a modern, flexible, force structure and infrastructure in the future.

While we did not conduct a cost analysis of our recommendations, it is obvious they will cost money. We do recognize budget realities, but we also believe the nation must make these new investments and U.S. leaders must communicate to U.S. citizens both the need and urgency to rebuild the nuclear infrastructure and modernize the nuclear forces. These investments in the nuclear enterprise are a relatively small portion of the overall defense budget but provide the backbone and foundation of deterrence and are the nation's highest defense priority. The investments the Commission recommends in both nuclear and conventional capabilities will provide a safe, secure, reliable, effective, and credible deterrent, which is essential to reduce the risk of conflict, most importantly nuclear conflict.

From the outset the Commissioners understood that our most valuable contribution to U.S. national security would be a consensus report. There were certainly differences of opinion and a multitude of views expressed amongst our members during our many robust debates and discussions. No doubt some commissioners might have stated some things differently. For example, a number of commissioners believe it is inevitable that the size of the U.S. nuclear stockpile and the number of delivery systems should increase. We all agreed, however, on the findings and recommendations in this report and the need for actions now to better position the United States for the future and ensure a safe, secure, reliable, and credible deterrent.

We believe that sustained bipartisan consensus is possible and necessary to secure a strong future and credible deterrent for the United States. Moreover, we hope this report illustrates to policy-and decision-makers that even with different opinions, people of good faith can work together for the common good on fundamentally important matters.

This report would not have been possible without the excellent work of the Institute for Defense Analyses (IDA) leadership and staff. We extend a sincere thank you to our Executive Director, Maj. Gen. William Chambers (USAF retired) and the IDA staff.

Executive Summary of the Final Report

The United States faces a strategic challenge requiring urgent action. Given current threat trajectories, our nation will soon encounter a fundamentally different global setting than it has ever experienced: we will face a world where two nations possess nuclear arsenals on par with our own. In addition, the risk of conflict with these two nuclear peers is increasing. It is an existential challenge for which the United States is ill-prepared, unless its leaders make decisions now to adjust the U.S. strategic posture.

The Congressional Commission on the Strategic Posture of the United States was established by the Fiscal Year (FY) 2022 National Defense Authorization Act (NDAA), and concludes that America's defense strategy and strategic posture must change in order to properly defend its vital interests and improve strategic stability with China and Russia. Decisions need to be made now in order for the nation to be prepared to address the threats from these two nuclear-armed adversaries arising during the 2027-2035 timeframe. Moreover, these threats are such that the United States and its Allies and partners must be ready to deter and defeat both adversaries simultaneously.

We arrive at these conclusions following a comprehensive year-long review of the threats America faces and its strategy and planned capabilities to address those threats. The evidence demonstrates that the U.S.-led international order and the values it upholds are at risk from the Chinese and Russian authoritarian regimes. The risk of military conflict with those major powers has grown and carries the potential for nuclear war. Therefore, the Commission reached the unanimous, non-partisan conclusion that today's strategic outlook requires an urgent national focus and a series of concerted actions not currently planned. In sum, we find 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.

In reaching that overall conclusion, we make clear that the fundamentals of America's deterrence strategy remain sound, but the application of that strategy must change to address the 2027-2035 threat environment. Those changes drive necessary adjustments to the posture of U.S. nuclear capabilities—in size and/or composition. A full spectrum of non-nuclear capabilities is also essential to the nation's strategic posture. Such adjustments, in turn, drive the need to strengthen and expand the capacity of the infrastructure required to sustain and enhance U.S. strategic capabilities. In addition, Allies and partners are central to our findings regarding strategy and posture. We also emphasize the need for robust risk reduction efforts as fundamental to the U.S. approach in the new threat environment.

Adhering to the stipulations of our mandate, the report that follows delineates 131 findings and makes 81 recommendations. Those findings and recommendations are found at the beginning and end, respectively, of each chapter that follows; a complete list is also included following the report's conclusion. Our most important recommendations are summarized here:

STRATEGY

To achieve the most effective strategy for stability in light of the 2027-2035 threat environment, the Commission identifies three necessary changes:

- The United States must develop and effectively implement a truly integrated, whole-of-government strategy to address the 2027-2035 threat environment.
- The objectives of U.S. strategy must include effective deterrence and defeat of simultaneous Russian and Chinese aggression in Europe and Asia using conventional forces. If the United States and its Allies and partners do not field sufficient conventional forces to achieve this objective, U.S. strategy would need to be altered to increase reliance on nuclear weapons to deter or counter opportunistic or collaborative aggression in the other theater.
- The size and composition of the nuclear force must account for the possibility of combined aggression from Russia and China. U.S. strategy should no longer treat China's nuclear forces as a "lesser included" threat. The United States needs a nuclear posture capable of simultaneously deterring both countries.

The Commission recommends the United States maintain a nuclear strategy consistent with the Law of Armed Conflict (LOAC), based on six fundamental tenets—assured second strike, flexible response, tailored deterrence, extended deterrence and assurance, calculated ambiguity in declaratory policy, hedge against risk—and apply these tenets to address the 2027-2035 threat.

STRATEGIC POSTURE

In the context of a strategic posture deploying both conventional and nuclear capability, the Commission believes the traditional role of nuclear weapons in U.S. defense strategy remains valid and of continuing importance: deterrence of adversaries; assurance of Allies; achieving U.S. objectives should deterrence fail; and hedging against adverse events.

The current modernization program should be supplemented to ensure U.S. nuclear strategy remains effective in a two-nuclear-peer environment.

Comprehensive risk-mitigating actions across U.S. nuclear forces must be executed to ensure that delays in modernization programs or early age-out of currently deployed systems do not result in militarily significant shortfalls in deployed nuclear capability.

The U.S. strategic nuclear force posture should be modified to:

- Address the larger number of targets due to the growing Chinese nuclear threat.
- Address the possibility that China will field large-scale, counterforce-capable missile forces that pose a threat to U.S. strategic nuclear forces on par with the threat Russia poses to those forces today.
- Assure the United States continues to avoid reliance on executing Intercontinental Ballistic Missile (ICBM) launch under attack to retain an effective deterrent.

- Account for advances in Russian and Chinese integrated air and missile defenses (IAMD).

The U.S. theater nuclear force posture should be urgently modified to:

- Provide the President a range of militarily effective nuclear response options to deter or counter Russian or Chinese limited nuclear use in theater.
- Address the need for U.S. theater nuclear forces deployed or based in the Asia-Pacific theater.
- Compensate for any shortfall in U.S. and allied non-nuclear capabilities in a sequential or simultaneous two-theater conflict against Russia and China.
- Address advances in Russian and Chinese IAMD.

NUCLEAR SECURITY ENTERPRISE INFRASTRUCTURE AND ORGANIZATION

The Commission recommends the DOD and DOE/NNSA strategic infrastructure be expanded to have sufficient capacity to:

- Meet the capability and schedule requirements of the current nuclear modernization POR and the requirements of the force posture modifications recommended by the Commission in time to address the two-peer threat.
- Provide an effective hedge against four forms of risk: technical failure of a warhead or delivery system, programmatic delays, operational loss of delivery systems, and further deterioration of the geopolitical environment.
- Flex to respond to emerging requirements in a timely fashion.

To support the proposed strategy, the Commission recommends Congress fund an overhaul and expansion of the capacity of the U.S. nuclear weapons defense industrial base and the DOE/NNSA nuclear security enterprise, including weapons science, design, and production infrastructure. Specifically:

- Congress should fund the full range of NNSA's recapitalization efforts, such as pit production and all operations related to critical materials.
- Congress should forge and sustain bipartisan consensus and year-to-year funding stability to enable the defense industry to respond to innovative DOD contracting approaches and invest with more certainty.
- Congress should enact annual DOD and DOE authorization and appropriation bills before the beginning of each fiscal year.
- Congress should place the purview of all "050" programs (President's Budget line item for "national security") that are in NNSA under Defense appropriations subcommittees (House Appropriations).
- Cabinet Secretaries, working with states and union leaders, should establish and increase the technical education and vocational training programs required to create the nation's necessary skilled-trades workforce for the nuclear enterprise. Committee-Defense (HAC-D), Senate Appropriations Committee Defense (SAC-D).

The Commission recommends a number of specific actions to expand the capacity and effectiveness of the nation's infrastructure and supply chain for its strategic capabilities.

NON-NUCLEAR CAPABILITIES

The Commission recommends:

- The United States urgently deploy a more resilient space architecture and adopt a strategy that includes both offensive and defensive elements to ensure U.S. access to and operations in space.
- The United States and its Allies take steps to ensure they are at the cutting edge of emerging technologies—such as big data analytics, quantum computing, and artificial intelligence (AI)—to avoid strategic surprise and potentially enhance the U.S. strategic posture.
- The United States prioritize funding and accelerate long-range non-nuclear precision strike programs to meet the operational need and in greater quantities than currently planned.
- The United States develop and field homeland IAMD that can deter and defeat coercive attacks by Russia and China, and determine the capabilities needed to stay ahead of the North Korean threat.⁴
- The Secretary of Defense direct research, development, test and evaluation into advanced IAMD capabilities leveraging all domains, including land, sea, air, and space. These activities should focus on sensor architectures, integrated command and control, interceptors, cruise and hypersonic missile defenses, and area or point defenses. The DOD should urgently pursue deployment of any capabilities that prove feasible.
- The Secretary of Defense and the Military Departments transfer operations and sustainment responsibility for missile defense to the appropriate Military Departments by 1 October 2024. This will allow the Missile Defense Agency (MDA) to focus on research, development, prototyping and testing.

ALLIES AND PARTNERS

The Commission believes it is in the U.S. national interest to maintain, strengthen, and when appropriate, expand its network of alliances and partnerships. These relationships strengthen American security by deterring aggression regionally, before it can reach the U.S. homeland, while also enabling U.S. economic prosperity through access to international markets. Withdrawing from U.S. alliances and partnerships would directly benefit adversaries, invite aggression that the United States might later have to reverse, and ultimately decrease American, allied, and partner security and economic prosperity. Further,

⁴ A “coercive” attack consists of limited conventional or nuclear strikes intended to convince U.S. leadership that the costs of intervening or persevering in a conflict involving the attacker are too high.

the Commission believes that our defense and the defense of the current international order is strengthened when Allies can directly contribute to the broader strategic posture, and the United States should seek to incorporate those contributions as much as possible.

- The Executive branch should recognize that any major change to U.S. strategic posture, policies, or capabilities will have great effect on Allies' perceptions and their deterrence and assurance requirements. As a result, any changes should be predicated on meaningful consultations.

RISK REDUCTION

The Commission believes it is of paramount importance for the United States to work to reduce strategic risks. This involves activities and programs across the U.S. government, including in nonproliferation and arms control, as well as maintaining strong, viable, and resilient military forces.

- The Commission recommends that a strategy to address the two-nuclear-peer threat environment be a prerequisite for developing U.S. nuclear arms control limits for the 2027-2035 timeframe. The Commission recommends that once a strategy and its related force requirements are established, the U.S. government determine whether and how nuclear arms control limits continue to enhance U.S. security.
- The Commission recommends that the United States continue to explore nuclear arms control opportunities and conduct research into potential verification technologies in order to support or enable future negotiations in the U.S. national interest that seek to limit all nuclear weapon types, should the geopolitical environment change.
- Where formal nuclear arms control agreements are not possible, the Commission recommends pursuing nuclear risk reduction measures to increase predictability and reduce uncertainty and the chances for misperception and miscalculation.

The 2009 Congressional Commission on the Strategic Posture of the United States reported that the United States was at “a moment of opportunity, . . .but also a moment of urgency”—because the security environment had improved and the threat of nuclear proliferation was the principal concern. Since 2009, the security environment has dramatically worsened and new existential threats have emerged. This Commission concludes that the United States now faces a high stakes challenge that requires urgent action. Nevertheless, the Commission has not seen the U.S. government demonstrate the urgency and creativity required to meet the challenge. Nothing other than synchronized steps taken by the Executive and Legislative Branches will craft the strategy and build the posture the nation requires.

The challenges are unmistakable; the problems are urgent; the steps are needed now.

Document No. 2. Jon Kyl, Congressional Record of the United States Senate, *Proceedings and Debates of the 106th Congress, First Session, October 8, 1999*, pp. S12258-S12262.**

Mr. President, I rise today to explain why I strongly oppose the Comprehensive Test Ban Treaty that has been submitted to the Senate for its advice and consent. I think the words of six distinguished Americans who formerly bore the responsibility for safeguarding our nation's security as Secretary of Defense frame the issue before the Senate quite well. In a letter to the majority leader this week, James Schlesinger, Dick Cheney, Frank Carlucci, Caspar Weinberger, Donald Rumsfeld, and Melvin Laird who served as Secretaries of Defense in the Reagan, Bush, Ford, and Nixon administrations, stated:

"As the Senate weighs whether to approve the Comprehensive Test Ban Treaty (CTBT) we believe Senators will be obliged to focus on one dominant, inescapable result were it to be ratified: over the decades ahead, confidence in the reliability of our nuclear weapons stockpile would inevitably decline, thereby reducing the credibility of America's nuclear deterrent."

For this reason, these former Secretaries of Defense conclude that the CTBT is "incompatible with the Nation's international commitments and vital security interests . . . Accordingly, we respectfully urge you and your colleagues to preserve the right of this nation to conduct nuclear tests necessary to the future viability of our nuclear deterrent by rejecting approval of the present CTBT."

I couldn't agree more with the considered judgment of these distinguished Americans who have had the awesome responsibility of maintaining the U.S. nuclear deterrent throughout the cold war and beyond.

Before discussing some of the flaws of the CTBT and how it will undermine the credibility of our nuclear deterrent, a few words on the importance of nuclear deterrence, and the limits of arms control I think are in order.

As my colleagues recall, during the cold war, the Soviet Union enjoyed a tremendous advantage in conventional military forces in Europe. The United States was able to offset this advantage in conventional forces, and to guarantee the security of Western Europe until the cold war ended peacefully, through the maintenance of a credible nuclear deterrent. Our nuclear "umbrella," as it is called, was extended to our allies in other parts of the world as well.

Since the end of the cold war, some have argued that nuclear deterrence is an outdated concept, and the U.S. no longer needs to retain a substantial nuclear weapons capability. However, deterrence is not a product of the cold war and has been around since the beginning of diplomacy and war. Over 2,500 years ago, the Chinese philosopher Sun Tzu wrote about

** Available at <https://www.govinfo.gov/content/pkg/CREC-1999-10-08/pdf/CREC-1999-10-08-pt1-PgS12257-6.pdf#page=1>.

the value of deterrence stating, “To win one hundred victories in one hundred battles is not the acme of skill. To subdue the enemy without fighting is the acme of skill.”

Furthermore, the end of the cold war does not mean national security threats to the United States have evaporated. James Woolsey, President Clinton’s first Director of Central Intelligence, aptly described the current security environment when he said, “We have slain a large dragon [the Soviet Union]. But we live now in a jungle filled with a bewildering variety of poisonous snakes.”

Rogue nations like North Korea, Iran, and Iraq have weapons of mass destruction programs and are hostile to the United States. China is an emerging power whose relationship with the United States has been rocky at best. And Russia retains significant military capabilities, including over 6,000 strategic nuclear warheads.

The gulf war is an excellent case study of the continuing importance of nuclear deterrence in the post-cold-war world. In that conflict, the maintenance of a credible nuclear weapons capability, coupled with the understanding that it was possible that the United States would respond with nuclear weapons if attacked with other weapons of mass destruction, saved lives by deterring such an attack.

As my colleagues recall, Iraq possessed a large arsenal of chemical weapons that it had used against its Kurdish population, and against Iranian troops during the Iran-Iraq war in the 1980s. It is widely acknowledged that Iraq did not use chemical weapons against the United States-led coalition during the gulf war because we possessed a credible nuclear deterrent.

Prior to the start of the gulf war, U.S. leaders practiced the art of deterrence by issuing clear warnings to Saddam Hussein. Secretary of Defense Dick Cheney stated:

“He [Saddam Hussein] needs to be made aware that the President will have available the full spectrum of capabilities. And were Saddam Hussein foolish enough to use weapons of mass destruction, the U.S. response would be absolutely overwhelming and it would be devastating. He has to take that into consideration, it seems to me, before he embarks upon a course of using those kinds of capabilities.”

President Bush also sent a strongly worded message to Saddam Hussein which said:

“Let me state, too, that the United States will not tolerate the use of chemical or biological weapons. . . . The American people would demand the strongest possible response. You and your country will pay a terrible price if you order unconscionable acts of this sort.”

Iraqi officials have confirmed that these statements deterred Baghdad from using chemical and biological weapons. In 1995, Foreign Minister Tariq Aziz reported to Rolf Ekeus, chairman of the U.N. commission charged with inspecting Iraqi weapons of mass destruction facilities, that Iraq was deterred from using its arsenal of chemical and biological weapons because the Iraqi leadership had interpreted Washington’s threats of devastating retaliation as meaning nuclear retaliation.

Aziz's explanation is corroborated by a senior defector, General Wafic Al Sammarai, former head of Iraqi military intelligence, who stated:

"Some of the Scud missiles were loaded with chemical warheads, but they were not used. We didn't use them because the other side had a deterrent force. I do not think Saddam was capable of taking a decision to use chemical weapons or biological weapons, or any other type of weapons against the allied troops, because the warning was quite severe, and quite effective. The allied troops were certain to use nuclear arms and the price will be too dear and too high."

Mr. President, as these statements show, a credible nuclear deterrent remains vitally important to our nation. I would hope that we could begin this debate on the CTBT by agreeing that a strong U.S. nuclear deterrent remains essential and that the Senate should reject any actions that would undermine the credibility of this deterrent.

To the second preliminary point, the fallacy of arms control:

Unfortunately, the CTBT negotiated by the Clinton administration would do just that. This is not surprising since the Clinton administration has sought to protect our national security with a fixation on arms control that columnist Charles Krauthammer aptly calls "Peace through Paper."

Of course, arms control is not a new idea. After all, in the year 1139, the Roman Catholic Church tried to ban the crossbow. Like so many other well intentioned arms control measures, this one was doomed to failure from the start.

And who can forget the Kellog-Briand treaty, ratified by the United States in 1929, that outlawed war as an instrument of national policy. This agreement and others spawned in its wake left the United States and Britain unprepared to fight and unable to deter World War II.

Yet despite these and many other notable failures, the Clinton administration still looks to arms control as the best way to safeguard our security. Under Secretary of State John Holum explained this philosophy during a speech in 1994, stating [:]

"The Clinton Administration's policy aims to protect us first and foremost through arms control—by working hard to prevent new threats—and second, by legally pursuing the development of theater defenses for those cases where arms control is not yet successful."

The administration continues to cling tenaciously to the ABM Treaty, which prevents us from defending ourselves against missile attack, and numerous other arms control measures have been proposed by senior officials like Secretary of State Madeleine Albright, such as bans of shoulder-fired surface-to-air missiles, laser weapons, anti-satellite weapons, landmines, and even a proposal to limit the availability of assault rifles.

As George Will has said of the administration's arms control philosophy,

"The designation 'superstition' fits because the faith of believers in arms control is more than impervious to evidence, their faith is strengthened even by evidence that actually refutes it."

There is enduring wisdom in President Reagan's statement of "Peace through strength." In 1780, our Nation's first President, George Washington said, "There is nothing so likely to

produce peace as to be well prepared to meet an enemy.” Two hundred years later another President, Ronald Reagan, called this doctrine “Peace Through Strength.”

I urge Senators to think about the enduring wisdom of these statements in the coming days as we debate the Comprehensive Test Ban Treaty and the negative effects its ratification would have on our Nation’s security.

Let me turn now to a discussion of the CTBT’s many flaws.

America’s nuclear weapons are the most sophisticated in the world. This was the point of the letter of the former Secretaries of Defense. They pointed out that each one typically has thousands of parts, and over time in nuclear materials and high-explosive triggers in our weapons deteriorate, and we lack the experience predicting the effect of these changes.

Some of the materials used in our weapons, like plutonium, enriched uranium, and tritium, are radioactive materials that decay, and as they decay they also change the properties of other materials within the weapon. We lack experience predicting the effects of such aging on the safety and reliability of our weapons.

We did not design our weapons to last forever. The shelf life of our weapons was expected to be about 20 years. In the past, we did not encounter problems with aging weapons, because we were fielding new designs and older designs were retired. But under the CTBT, we could not field new designs to replace older weapons, because testing would be required to develop new designs.

Remanufacturing components of existing weapons that have deteriorated also poses significant problems. Over time, manufacturing processes will change, some chemicals previously used in the production of our weapons have been banned by environmental regulations, and our documentation of the technical characteristics of older weapons, in some cases, is incomplete. Furthermore, as James Schlesinger—who formerly served as Secretary of defense and Secretary of Energy—has testified to the Senate, the plutonium pits in some of our weapons are approaching the end of this life-span. According to Dr. Schlesinger, one of our national laboratories estimates the pits used in some of our weapons will last 35 years. Since many of the pits used in the current arsenal are about 30 years old, this means that we will soon need to replace these pits. But without testing, we will never know if these replacement parts will work as their predecessors did.

As the former Director of the Lawrence Livermore National Laboratory, Dr. John Nuckolls said last month in a letter to me:

“Key components of nuclear warheads are ‘aging’ by radioactive decay and chemical decomposition and corrosion. Periodic remanufacture is necessary, but may copy existing defects and introduce additional defects. Some of the remanufactured parts may differ significantly from the original parts—due to loss of nuclear test validated personnel who manufactured the original parts, the use of new material and fabrication processes, and inadequate specification of original parts. There are significant risks of reducing stockpile reliability when remanufactured parts are involved in warhead processes where there are major gaps in our scientific understanding.”

The fact is that, despite our technical expertise, there is much we still do not understand about our own nuclear weapons. As C. Paul Robinson, Director of the Sandia National Laboratory has aid, “some aspects of nuclear explosive design are still not understood at the level of physical principles.”

These gaps in our knowledge do not merely present a theoretical problem. As President Bush noted in a report to Congress in January 1993, “Of all U.S. nuclear weapons designs fielded since 1958, approximately one-third have required nuclear testing to resolve problems arising after deployment.”

Furthermore, in 1987, Lawrence Livermore Lab produced a report titled “Report to Congress on Stockpile Reliability, Weapon Remanufacture, and the Role of Nuclear Testing” in which it extolled the importance of testing, noting that “. . . there is no such thing as a ‘thoroughly tested’ nuclear weapon.” The report also goes on to state that of the one-third of weapons designs introduced into the stockpile since 1958 that have required testing to fix, “In three-fourths of these cases, the problems were discovered only because of the ongoing nuclear testing.” This report went on to say that “Because we frequently have difficulty understanding fully the effects of changes particularly seemingly small changes on the nuclear performance, nuclear testing has been required to maintain the proper functioning of our nation’s deterrent.”

Secretary of Defense Caspar Weinberger summed this point up nicely in 1986 when he said:

“The irreducible fact is that nuclear testing is essential to providing for the safety and security of our warheads and weapons systems. It also is essential if we are to maintain their reliability. This is not a matter of conjecture, but a lesson learned through hard experience. For example, in the case of one nuclear system—the warhead for the Polaris [SLBM]—testing allowed us to fix defects that were suddenly discovered. Until corrected, these defects could have rendered the vast majority of weapons in our sea-based deterrent completely inoperable.”

The importance of testing to the maintenance of any complex weapon or machine cannot be underestimated. As the six former Secretaries of Defense noted in this letter opposing the CTBT,

“The history of maintaining complex military hardware without testing demonstrates the pitfalls of such an approach. Prior to World War II, the Navy’s torpedoes had not been adequately tested because of insufficient funds. It took nearly two years of war before we fully solved the problems that caused our torpedoes to routinely pass harmlessly under the target or to fail to explode on contact. For example, at the Battle of Midway, the U.S. launched 47 torpedo aircraft, without damaging a single Japanese ship. If not for our dive bombers, the U.S. would have lost the crucial naval battle of the Pacific war.”

The Clinton administration has proposed a program that it hopes will replace actual nuclear tests with computer simulations and a much greater emphasis on science-based

experiments. It is called the Stockpile Stewardship Program. According to the Fiscal Year 2000 Stockpile Stewardship Plan Executive Overview, released by the Department of Energy in March this year:

“The overall goal of the Stockpile Stewardship program is to have in place by 2010 ...the capabilities that are necessary to provide continuing high confidence in the annual certification of the stockpile without the necessity for nuclear testing.”

I support the Stockpile Stewardship Program because it will improve our knowledge about our nuclear weapons. But as former Secretary of State Henry Kissinger, former National Security Advisor Brent Scowcroft, and former CIA Director John Deutch said in a letter this week, “the fact is that the scientific case simply has not been made that, over the long term, the United States can ensure the nuclear stockpile without nuclear testing.”

First, the Stockpile Stewardship Program faces tremendous technical challenges. As the Director of Sandia National Laboratories, Dr. Robinson has said, “the commercially available and laboratory technologies of today are inadequate for the stockpile stewardship tasks we will face in the future. Another hundred-to-thousand-fold increase in capability from hardware and software combined will be required.”

Dr. Victor Reis, the architect of the stewardship program, said this about it during a speech in Albuquerque:

“Think about it—we are asked to maintain forever, an incredibly complex device, no larger than this podium, filed with exotic, radioactive materials, that must create, albeit briefly, temperatures and pressures only seen in nature at the center of stars; do it without an integrating nuclear test, and without any reduction in extraordinarily high standards of safety and reliability. And, while you’re at it downsize the industrial complex that supports this enterprise by a factor of two, and stand up critical new manufacturing processes.

This within an industrial system that was structured to turn over new designs every fifteen years, and for which nuclear explosive testing was the major tool for demonstrating success.”

Senior officials at the Department of Energy and our nuclear labs are generally careful in how they couch their remarks about the Stockpile Stewardship Program. They typically state that the stewardship program is the best approach to maintaining our weapons in the absence of testing. But they are also careful not to guarantee that, despite the unquestioned brilliance of the scientists, the Stockpile Stewardship Program will succeed in replacing testing.

In fact, the Stockpile Stewardship Program has already experienced setbacks. For example, the National Ignition Facility, which is the linchpin of the program, has recently fallen behind schedule and is over budget. It still faces a critical technical uncertainty about a major goal of its design: will it be able to achieve thermonuclear ignition?

Another problem with relying on computer simulation to replace testing is the increased risk of espionage. Former Lawrence Livermore National Lab Director John Nuckolls made

this point in his letter to me as well: “Espionage is facilitated when U.S. progress is frozen, and classified information is being concentrated and organized in electronic systems.” In short, in order to achieve the vast increases in computing power required for the stewardship program, much of the computer code required for the program will be written by hundreds of people at participating universities and colleges—in many cases by people who are not even American citizens.

Mr. President, the bottom line is that a credible nuclear deterrent is just too important to put all our eggs in the stewardship basket.

In addition to impairing the reliability of our nuclear arsenal, the CTBT will prevent us from making our nuclear weapons as safe as they can be. This is extraordinarily important.

Nuclear weapon safety has always been a paramount concern of the United States. Throughout the history of our nuclear weapons program, we have made every effort to ensure that even in the most violent of accidents there would be the minimum chance of a nuclear explosion or radioactive contamination. The results of such an accident would be catastrophic.

That’s why President Clinton’s Secretary of Defense, Bill Cohen, opposed a test moratorium when he was a Senator. During debate on an amendment imposing a moratorium on testing, August 3, 1993, then-Senator Cohen said, “A vote to halt nuclear testing today is a vote to condemn the American people to live with unsafe nuclear weapons in their midst for years and years—indeed until nuclear weapons are eliminated. Not just a few unsafe nuclear weapons, but a nuclear stockpile in which most of the weapons do not have critical safety features.

I digress a moment to note when he was asked about this statement this week, now-Secretary Cohen said, we have replaced those weapons with weapons in our inventory now that are safe.

I know defense Secretary Cohen would agree, that is not a correct statement. All of the weapons in our current inventory lack one or more of the essential safety features that we have been talking about here.

As the Director of Los Alamos National Lab, Dr. Sig Hecker, indicated in a letter to me in 1997, “with a CTBT it will not be possible to make some of the potential safety improvements for greater intrinsic warhead safety that we considered during the 1990 time frame.” The reason is that nuclear tests must be done in many cases to confirm that once new safety features are incorporated, the weapons are reliable and still operate as intended. The CTBT makes it pointless to try to invent new, improved safety features because they could not be adopted without nuclear testing. Even worse, the CTBT eliminates the possibility of improving the safety of current weapons through the incorporation of existing, well understood safety features.

Safety features include items such as insensitive high explosive and fire resistant pits. Insensitive high explosive in the primary of a nuclear weapon is intended to prevent the premature detonation of the high explosive trigger, resulting in a potential nuclear explosion should the weapon be subjected to unexpected stress, like being dropped or penetrated by shrapnel or a bullet. Fire resistant pits are intended to prevent the dispersal of plutonium

resulting in radioactive contamination of an area should the weapon be exposed to a fire, such as an accidental blaze during loading of a weapon on an aircraft.

Unfortunately, few people know that many of our current weapons do not contain all the safety features that already have been invented by our National Laboratories. Only one of the nine weapons in the current stockpile incorporates all six available safety features. In fact, three of the weapons in the stockpile—the W78 warhead, which is used on the Minuteman III ICBM, and the W76 and W88 warheads, which sit atop missiles carried aboard Trident submarines—incorporate only one of the six safety features. Another weapon, the W62 warhead, does not have any of the six safety features incorporated into its design.

The bottom line is that a ban on nuclear testing prevents us from making our weapons as safe as we know how to make them and creates a disincentive to making such safety improvements.

Mr. President, another point I think is extraordinarily important as we debate this CTBT is that the purpose of the treaty cannot be achieved by its ratification. In addition to undermining our nuclear deterrent, as I have just spoken to, the treaty will not achieve its goal of halting nuclear proliferation.

Supporters of the treaty say the United States must lead by example, and that by halting nuclear tests ourselves, we will persuade others to follow our example. Yet the history of the last eight years shows this theory is false. Since the United States halted testing in 1992, India, Pakistan, Russia, China, and France have all conducted tests.

Furthermore, the CTBT will not establish a new international norm against nuclear weapons testing or possession. The Nuclear Nonproliferation Treaty, the NPT ratified by 185 countries has already established such a norm. The NPT calls for parties to the treaty, other than the five declared nuclear powers—the United States, the United Kingdom, Russia, China, and France—to pledge not to pursue nuclear weapons programs.

Yet North Korea and Iraq, to name two who are parties to the NPT, have, of course, violated it. They have pursued nuclear weapons programs despite their solemn international pledge never to do so. The CTBT will not add anything useful to the international nonproliferation regime since these nations, in effect, would be pledging not to test the nuclear weapons they have already promised never to have under the NPT. So much for the international norm.

Nor will the CTBT pose a significant impediment to the acquisition of nuclear weapons by rogue nations since, although nuclear testing is essential to maintaining the sophisticated nuclear weapons in the U.S. arsenal today, it is not required to develop relatively simple first-generation nuclear devices, like those needed or being developed by Iran and Iraq. For example, the United States bomb dropped on Hiroshima was never tested, and the Israeli nuclear arsenal has been constructed without testing.

Incidentally, the Clinton administration does not dispute this point. In Senate testimony in 1997, CIA Director George Tenet stated:

“Nuclear testing is not required for the acquisition of a basic nuclear weapons capability (i.e. a bulky, first-generation device with high reliability but low efficiency.) Tests using high-explosive detonations only ([with] no nuclear yield)

would provide reasonable confidence in the performance of a first generation device. Nuclear testing becomes critical only when a program moves beyond basic designs to incorporate more advanced concepts.”

I believe Director Tenet is absolutely correct, based on the letter of the Secretary of Defense that I quoted earlier. We can’t afford to underestimate the weapon described by Director Tenet—a “bulky, first generation device with high reliability but low efficiency” is a lot like the bomb we dropped on Hiroshima to change world history. It is a strategic weapon—if North Korea or Iran were able to deploy such a weapon, they could—to put it mildly—severely reduce our ability to protect our interests in East Asia or the Persian Gulf. These are weapons that would be designed to intimidate and kill large numbers of people in cities, not destroy purely military targets, as the United States weapons are designed to do.

Another problem with the CTBT is that it is totally unverifiable. It cannot be verified despite the vast array of expensive sensors and detection technology being established under the treaty, so it will be possible for other nations to conduct militarily significant nuclear testing with little or no risk of detection. Effective verification requires high confidence that militarily significant cheating will be detected in a timely manner. The United States cannot now, and will not in the near future, be able to confidently detect and identify militarily significant nuclear tests of one kiloton or less by the way, that is roughly 500 times larger than the blast which destroyed the Murrah Building in Oklahoma City. We cannot detect a test of that magnitude.

What is “militarily significant” nuclear testing? Definitions of the term might vary, but I think we’d all agree that any nuclear test that gives a nation information to maintain its weapons or to develop newer, more effective weaponry is militarily significant.

In the course of U.S. weapons development, nuclear tests with yields between 1 kiloton and 10 kilotons have generally been large enough to provide “proof” data on new weapons designs. Other nations might have weaponry that could be assessed at even lower yields. As we know, crude but strategically significant weapons, like the bomb we dropped on Hiroshima, don’t need to be tested at all. But for the sake of argument, let’s be conservative and assume that other nations would also need to conduct tests at a level above 1 kiloton to develop a new nuclear weapon design.

The verification system of the CTBT is supposed to detect nuclear blasts above 1 kiloton, so it would seem at first glance that it will be likely that most cheaters would be caught. But look at the Treaty’s fine print—the CTBT’s International Monitoring System will be able to detect tests of 1 kilotons or more if they are nonevasive. This means that the cheater will be caught only if he does not try to hide his nuclear test.

But what if he does want to hide it? What if he conducts his test evasively?

It is a very simple task for Russia, China, or others to hide their nuclear tests. One of the best known means of evasion is detonating the nuclear device in a cavity such as a salt dome or a room mined below ground. Because it surrounds the explosion with empty space, this technique—called decoupling—reduces the noise, or the seismic signal, of the nuclear detonation.

The signal of a decoupled test is so diminished—by as much as a factor of 70—that it will not be possible to reliably detect it. For example, a 1,000-ton hidden test would have a signal of a 14-ton open test. This puts the signal of the illicit test well below the threshold of detection.

Decoupling is a well-known technique and is technologically simple to achieve. In fact, it is quite possible that Russia and China have continued to conduct nuclear testing during the past 7 years, while the United States has refrained from doing so. They could have done so by decoupling.

There are also other means of cheating that can circumvent verification. One is open-ocean testing. A nation could put a device on a small boat or barge, tow it into the ocean, and detonate it anonymously. It would be virtually impossible to link the test to the cheater.

While evasive techniques are expensive and complex, the costs are relatively low compared to the expense of a nuclear weapons program, and no more complicated than weapons design. Further, established nuclear powers are well positioned to conduct clandestine testing to assure the reliability and undertake at least modest up-grades of their arsenals. Russia and China do not have good records on compliance with arms control and nonproliferation commitments. In addition, according to the Washington Times, United States intelligence agencies believe China conducted a small underground nuclear test in June and Russia is believed to have conducted a nuclear test earlier this month. While neither country has ratified the CTBT, both have signed the treaty and have promised to adhere to a testing moratorium. Again, so much for the norm.

The bottom line is that a determined country has several means to conceal its weapons tests and the CTBT is not effectively verifiable.

Let me stress here that my assessment is not based on opinions. Our inability to verify a whole range of nuclear testing is well-known and has been affirmed by the U.S. Intelligence Community. As the Washington Post reported earlier this week, our intelligence agencies lack the ability to confidently detect low-yield tests. We would be irresponsible in the extreme to ratify an unverifiable arms control treaty—especially when that treaty will inevitably reduce our confidence in our own nuclear deterrent.

President Clinton's first Director of the Central Intelligence Agency, James Woolsey, summed up the problems with verification of the treaty stating in Senate testimony that, "I believe that a zero-yield Comprehensive Test Ban Treaty is extraordinarily difficult, to the point of near impossibility—and possibly to the point of impossibility—to verify from afar."

In addition to the negative consequences that would result from treaty ratification, I would also point out that this accord is very poorly crafted. The CTBT is weakest at its very foundation—it actually fails to say what it bans. Nowhere in its 17 articles and 2 annexes are the terms "nuclear weapon test explosion" or "nuclear explosion" defined or quantified and these are the terms used in the treaty's basic obligations.

Acting Under Secretary of State John Holum admitted this point in responses to questions for the record on June 29 of this year stating:

"The U.S. decided at the outset of negotiations not to seek international agreement on a definition of 'nuclear weapon test explosion' in the Treaty text. The course of negotiations confirmed our judgment that it would have been extremely difficult, and possibly counterproductive, to specify in technical terms what is prohibited by the Treaty."

May I read that again:

"The course of negotiations confirmed our judgment that it would have been extremely difficult, and possibly counterproductive, to specify in technical terms what is prohibited by the Treaty."

But another nation might choose to apply a less restrictive definition and conduct very low-yield testing, what we call hydronuclear testing. While the United States interprets the treaty to ban all nuclear explosives testing—that is why they call it a zero ban test—other nations could conduct very low-yield testing, as I said, which we could not verify but which they would consider in compliance with the treaty. This so-called hydronuclear testing is very useful to nuclear weapons programs by helping improve the understanding of fundamental nuclear weapons physics, develop new weapons concepts, ascertain existing weapons' reliability, and exercise the skills of scientists, engineers, and technicians. The nuclear energy released in a hydronuclear test can be less than the equivalent released by four pounds of conventional high explosives. This is virtually nothing, and such a low-yield test would almost certainly escape detection.

This is where the treaty's vagueness is actually harmful to our interests. Even if we were able to detect it, the nation conducting a hydronuclear test could simply argue that it was legal under the treaty. And they would have the historical CTBT negotiating record on their side. Many drafts of the CTBT prior to the Clinton administration allowed for low-yield "permitted experiments."

The verification regime of the CTBT—centered around the International Monitoring System, or IMS—will not be able to detect tests with far greater yields than hydronuclear tests. These tests can be conducted with virtually no risk of detection by either the IMS system or U.S. technical means.

There is much more to say about this treaty, but I believe I have outlined the primary reasons why the only prudent course for the Senate is to reject the CTBT. It will jeopardize rather than enhance our national security. It will undermine our vital nuclear deterrent by jeopardizing the reliability of our nuclear stockpile. It will prevent us from making our weapons as safe as they can be. It will not stop nuclear proliferation, and it is not verifiable. It is not worthy of Senate approval.

Document No. 3. Senator Jon Kyl, "Privilege Of The Floor (Executive Session)," *Congressional Record*, 106th Congress (1999 - 2000) - 1st Session, Vol. 145, No. 136, October 8, 1999, p. S12284.***

I want to talk a little bit about a common thread of the remarks of many of the people who are in opposition to the treaty; that is, that it is difficult for the United States to sustain our position as the world leader, that many in the international community would find it objectionable if the United States rejected the Comprehensive Test Ban Treaty, and that this would hurt our ability to lead with respect to proliferation of nuclear weapons in the world.

Let me quote from a newspaper story today in the Washington Post, the headline of which is, "U.S. Allies Urge Senate To Ratify Test Ban." It is certainly true that they have done that. There are a variety of them that made comments hoping we would adopt the treaty, not defeat it. Let me quote a couple of things.

"International anxiety also has been compounded by new worries over U.S. efforts to escape constraints imposed by the Anti-Ballistic Missile (ABM) Treaty, which limits the ability of the United States to build systems to defend against missile attack. Russia and China say it would destabilize the strategic balance if the United States built a missile defense system, because Washington could be tempted to attack others if it felt invulnerable to retaliation."

"Jayantha Dhanapala, the U.N. under secretary for disarmament affairs, said many countries agree to a permanent inspection regime four years ago only on the basis of a written guarantee by the nuclear powers to negotiate and ratify a worldwide test ban as one of several key steps toward nuclear disarmament."

I read two parts of the Washington Post story to suggest the world community, which does not want the United States to develop a ballistic missile defense, which doesn't want the United States to do anything that requires an amendment to the ABM Treaty, and some of which is very much in favor of total nuclear disarmament and has agreed to participate in this treaty only after leaders promised them this Comprehensive Test Ban Treaty would be one of several key steps toward nuclear disarmament, all of those people in the world, I submit, are not people who we want to make U.S. national defense policy. Their goals are not the same as our goals.

We have an obligation as the leader of the free world to ensure our nuclear deterrent is safe and reliable; they don't. We may have to do things they could never dream of doing, including nuclear testing to ensure the safety and reliability of our nuclear stockpile. They don't have to worry about that, but we do. While they can lament the fact that the United States is not willing to sign onto the treaty, they don't have the same responsibility as we do, just as they can call for us not to amend the ABM Treaty or to build a national missile defense or even theater missile defenses without the obligations that The United States has.

*** Available at <https://www.congress.gov/106/crec/1999/10/08/145/136/CREC-1999-10-08-pt1-PgS12264.pdf>.

The United States has to defend our troops around the world--which most of these countries don't have to do--to defend allies around the world and, of course, even to defend the United States. I, frankly, don't care much if people around the world who don't want the United States to defend itself against ballistic missile attack are going to criticize the Senate for rejecting a flawed unverifiable ineffective CTBT.

Finally, quoting from the last two paragraphs of this article:

"I don't like to talk about any country exercising world leadership, but in this case we see that the United States must play a special role,' Sha Zukang, China's top arms control official, said in an interview. Sha added that China is even more alarmed by U.S. efforts to develop a regional missile defense system than by the Senate's reluctance to approve a test ban treaty."

So I presume that next, in order to assuage the concerns of the Chinese, we will forego the development of a regional missile defense system because it would upset them if we proceeded with that. Why would it upset them? Because, of course, they wouldn't be able to threaten Taiwan. We have obligations that other countries don't have. If we are to be the great leader that people on this side of the aisle have urged the United States to be, then we have to exercise leadership. Sometimes that means doing things other people in the world are uncomfortable with.

"Boris Kvok, Russia's deputy chief of disarmament issues, said the U.S. decision on the test ban treaty would not affect the deliberations of Russia's parliament on the pact or alter his country's test moratorium. "But if the U.S. moves ahead with ballistic missile defense, it would be a disaster . . . and we would have to start developing new weapons. . . ."

He is saying we don't really care about the CTBT in terms of what we are going to do, but if the United States moves ahead with ballistic missiles, that would be a disaster. I presume next we hear people come to the Senate floor and say international opinion says we should not develop a missile defense to protect the people of the United States so we should not move forward with that.

My point is this: The United States cannot be held hostage to world opinion. We have obligations they don't have, and if they don't care about building a defense for their people, we need to because we can be a target of rogue nations whereas other countries may not be. They are not making the decisions and actions in the world that may cause these terrorists or rogue states to want to retaliate against them. However, the United States, by taking a world leadership role, has put itself in that position.

It is not a political issue; it is a physics issue. We have to have confidence in our nuclear stockpile.

The whole world thought Ronald Reagan was wrong, that he had left his senses when he said no to Mikhail Gorbachev at Reykjavik. They both talked about trying to rid the world of nuclear weapons. When Gorbachev said the price of that agreement was that the United States would have to forego the development of the Strategic Defense Initiative, Reagan said

no. All of the world leaders gasped--except Margaret Thatcher. But the rest of the world leaders gasped and said: Mr. President, you should reconsider that.

All of the arms control advocates said it was a bad mistake for President Reagan to have said no. Of course, it later transpires that George Shultz mentioned the fact that Mikhail Gorbachev told him that was the turning point of the cold war. That is when Gorbachev concluded that he could not win the cold war and called it the turning point.

Ronald Reagan, in calling the Soviet Union the evil empire, upset a lot of the world leaders, but he stood his ground and history has proven him correct. I submit that history will prove us correct if we return this flawed treaty and say let's go back to the drawing board.

We can do better. We can persuade world leaders it is in the best interest of long-term peace that we do better than this flawed treaty.