ANTICIPATING THE NEXT CHAPTER IN U.S. NUCLEAR DETERRENCE STRATEGY
Annotated Bibliography

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Anticipating the Next Chapter in U.S. Nuclear Deterrence Strategy

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Key Questions:

- How consequential for U.S. nuclear policy and posture are recent changes in the security environment?
- What progress have the U.S. and its allies and partners made in adapting deterrence policy and posture to new factors?
- What further adaptations are needed? Are they evolutionary or revolutionary in character?
- What can and should be done to accelerate adaptation?

Panel Topics:

1. The Major Power Dimension: Beyond Rivalry to Confrontation
2. The Regional Challengers: Beyond Prevention to Deterrence?
3. The Risk Framework: Beyond Sequential to Simultaneous Wars
4. Regional Wars: Beyond Conventional Dominance
5. Adapting Deterrence Strategy: Beyond the Traditional “Fundamentals?”
6. Adapting the Strategic Deterrent: Beyond “No New” Modernization?
7. Adapting the Theater Deterrent: Beyond Limited Incrementalism?
8. Adapting the Hedge: Beyond Upload?
9. Adapting Arms Control: Beyond Reductions?
10. Anticipating the Politics of Life Outside the Comfort Zone

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Panel 1: The Major Power Dimension: Beyond Rivalry to Confrontation

- How and to what extent have Russia and China become more confrontational?
- Why have they become more confrontational? Are they more risk acceptant? Why?
- What future behaviors should we expect?


Hill and Stent argue that Putin did not invade Ukraine because he was threatened or provoked by NATO, but because he believes Russia has an inherent, historical right to control Ukraine. He seeks to shape the future to look like his version of the past and wants a world where Russia presides over a new Slavic union composed of Belarus, Russia, Ukraine and other territories populated by Russian speakers. Although Western economic sanctions are broad and support for Ukraine unified, Putin seems to believe Russia’s economy can endure longer than Europe’s unity can without Russian energy imports; he also believes economic hardship will eventually lead to political turmoil and erode Western support for Ukraine.


The authors posit that Putin’s confrontational approach can be directly traced back to the 1996 Primakov Doctrine that set Russia’s sights on a multipolar world order with Russia as one of its independent centers that no longer follows the lead of the West. Moscow’s post-2012 foreign policy also fits comfortably in the long-standing historical and intellectual tradition of Soviet and pre-Soviet Russian foreign policy and displays of three centuries-old drivers of Moscow’s posture on the world stage: seeking buffers via geographic expansionism, a deep-seated ambition to be regarded as a great power, and the perception of Western hostility. Gurganus and Rumer note that as the confrontation with the West continues over the long-term, the Kremlin toolkit will meld tested influence means with modern technology and tactics.


Edmonds assesses that Russia’s potential use of nuclear weapons against Ukraine could take several forms. It could be a demonstration strike, a strike against military units to change the operational situation on the ground, or, given the level of Russian barbarity, it could also be an attack against a city. Russia’s nuclear use would present NATO and the United States with complicated policy options. The two extremes, responding in kind and
pushing for a settlement, would be unwise given the escalatory risks or potential for establishing destructive and unstable patterns of behavior. The two other options—escalating conventionally against Russia or staying the course—each have their own risks and levels of uncertainty. He observes that, except for capitulating to nuclear coercion, it is difficult to see how Russia’s use of nuclear weapons in Ukraine would not significantly increase the odds for direct NATO-Russia conflict.


Doshi argues that since the end of the Cold War, China’s grand strategy is to displace the U.S.-led world order, first regionally and then globally, by controlling global governance institutions and advancing autocratic norms. The Chinese Communist Party’s (CCP) centralized authority, amorality, and nationalism allow it to connect all aspects of Chinese society behind the goal of assuming global leadership by 2049. The author posits that China became emboldened to take more confident approach after the global financial crisis, when it began to view the United States as a declining nation. Now, with the invocation of “great changes unseen in a century,” China is expanding its blunting and building efforts worldwide. Doshi warns that China’s recent assertiveness is not a product of Xi’s personality, but the long-standing CCP consensus.


Scobell notes that the jump in Chinese military capability has changed the strategic calculus as CCP leaders now considering a military take-back of Taiwan a real possibility. Still, the PLA likely does not yet have the capability to conduct a full-scale invasion against Taiwan. Russia’s current struggles in Ukraine are also likely giving the CCP pause. The author recommends that the United States should continue its policy of encouraging peaceful cross-strait relations instead of pushing to support Taiwan, because if the CCP believes that there are no prospects for peaceful unification, the odds of it deciding to go to war increase dramatically.

Turpin, Matt. “Yes, This is a Cold War.” The Wire China, 14 November 2021. [https://chinaarticles.substack.com/p/oped-yes-this-is-a-cold-war].

Turpin makes an argument about striking similarities between the ‘Cold War’ with the Soviet Union and the ongoing ‘cold war’ with China. For example, the West’s current objective, to maintain a liberal international order over authoritarian regimes, is the same as it was when it employed containment against the Soviet Union; however, the strategy to be used against China to achieve it will be somewhat different. The author argues that as the CCP has long since identified the United States as a competitor and an adversary and seeks to influence U.S.
elites to not compete against China, the United States must separate its understandable distaste for cold wars from a clear-eyed assessment of the reality it faces.

Panel 2: The Regional Challengers: Beyond Prevention to Deterrence?

- How has North Korea’s progress in assembling a small nuclear force affected its strategy and behavior? What uses might it make of its new nuclear capabilities?
- How has Iran’s progress in developing its nuclear potential affects its strategy and behavior? What uses might it make of its new capabilities?
- Are U.S. deterrence strategy and posture adequately tailored for these challenges?


Lee assesses that North Korea still does not have the quality or quantity of nuclear weapons required to use coercive nuclear strategies such as brinksmanship, despite its investing heavily in nuclear technology relative to its aging conventional force. He recommends that the United States and South Korea should push North Korea toward a defensive nuclear strategy with a high threshold for nuclear use by reinforcing U.S. extended deterrence for South Korea, strengthening the alliance’s relationship with Japan, building up the South Korean military, and discussing North Korea’s potential destabilizing nuclear program with other concerned parties like China and Russia.


Smith and Bernstein observe that little is known about North Korea’s nuclear command and control architecture. They postulate that there are five alternative command and control models North Korea might adopt, and each has different advantages and exploitable vulnerabilities. Even though the nuclear model North Korea will adopt will be shaped by the strategic environment, any operational consideration will be overridden by the unique personalist authority Kim Jong Un holds over the country and its nuclear weapons. The authors recommend that military planners should avoid a singular focus on any one model, and instead conduct table-top exercises with relevant military and political actors to prepare them for each scenario and to facilitate better extended deterrence dialogues with South Korea.
Rouhi observes that Iran’s strategy since 2003 can best be described as nuclear hedging. Iran has been developing nuclear capabilities in order to maintain the option of building a weapon in the future should it decide to do so, while also downplaying and sidestepping international opposition in order to build negotiating leverage. She argues that since the Trump administration attempted to pressure Iran into making concessions on its nuclear program and missile development, Iran may decide to withdraw from the Nuclear Non-proliferation Treaty (NPT) entirely. It is becoming more of a mainstream policy option in Iran. The withdrawal from the NPT and acceleration of the enrichment program would not necessarily imply Iranian decision to build nuclear weapons but could be used by Iran as a valuable bargaining chip in negotiations to obtain significant sanctions relief.

Brewer argues that the United States cannot rely on the eventual reinstatement of the Iran nuclear deal to resolve the threat of Iranian nuclear breakout. Since it began ignoring the limits set by the Iran deal in 2015, Iran is at the point where it could develop weapons-grade uranium in a few weeks. Even if Iran is nuclear capable but does not produce a bomb, stability in the Middle East would be negatively impacted by increased Iranian aggression backed by the threat of nuclear breakout. The author recommends that to prevent nuclear-armed Iran, the United States should engage in efforts aimed at speeding up its own and international capability to detect Iranian breakout. It should also enhance its ability to quickly respond, including through shortening military response time.

Panel 3: The Risk Framework: Beyond Sequential to Simultaneous Wars

- What are the new risks of simultaneous wars in Europe and Asia, whether coordinated or merely opportunistic?
- How prepared is the U.S. for the two-theater challenge and what must it do to better prepare?
- What can and should U.S. allies and partners contribute to deterrence in this context?

Brands and Montgomery contend that the possibility of opportunistic aggression should no longer be discounted. Beyond the canonical scenario of one enemy launching a major war while America is already fighting another enemy, opportunistic aggression could
encompass a spectrum of more subtle options, including proxy conflict and diplomatic pressure aimed at altering the status quo or imposing costs without firing a shot. The most straightforward way to dissuade opportunistic aggression is to invest in defense to the point where the United States could handle two wars at once, but this is not likely to be financially feasible. Even though there is a number of other strategies for averting opportunistic aggression, none offer an easy, unproblematic, and low-cost solution to the problem.


Colby argues that the rise of China as a menacing challenger to the United States at the global scale creates the real risk that the United States may find itself facing more than one conflict at once, and possibly more than one great power conflict at once, be it by chance or by deliberately coordinated opportunistic aggression. Yet, the United States cannot feasibly double its defense budget to shoulder the defense of all the regions of the world at once. Instead, the United States should focus its resources on Asia and enable its European allies to quickly take much greater role of their own self-defense.


Kroenig argues that though some suggest that the United States should let its European allies handle the defense of their continent and instead focus on Asia, this idea misses the fact that the United States seeks to maintain stability in both regions. The United States cannot afford to choose between Europe and the Indo-Pacific and planning to only defeat one enemy instead of two is planning to fail. Though allies do need to do more to share the burden of their defense, the United States still needs to lead and can afford to double its defense budget.


One of the observations from Panels 1 -3 in this CGSR workshop is that the risk of opportunistic aggression is growing as there is extensive evidence that the leaders of Russia and China (and also North Korea and Iran) are becoming less adverse to risk and more assertive in challenging the regional and global orders. To ensure that extended deterrence is fit for purpose in 2030, the United States and its allies should accelerate their efforts to adjust military hardware and software for the purpose of deterrence.
campaigning. This requires a new division of labor between the United States and its allies.


Discussion during Panels 4 and 5 of this CGSR workshop identified several concerning scenarios in which a closer Russia-China alignment could negatively impact U.S. extended deterrence and assurance of allies. This includes a scenario in which Beijing takes advantage of a Russia-orchestrated crisis in Ukraine; a scenario in which either Russia or China chooses to directly test the robustness of U.S. extended deterrence in one region; or, a scenario of a catalytic aggression in which either Russia or China covertly raises tensions in the other region in order to have a greater freedom to pursue strategic objectives in their own region. Even though the U.S. focus is on peer competitors, continued attention is needed on challenges posed by North Korea and Iran. To alleviate the U.S. burden, the allies should invest in non-nuclear systems such as long-range precision strike capabilities, missile defense, space redundancy and resilience, and offensive cyber capabilities.

Panel 4: Regional Wars: Beyond Conventional Dominance

- How have potential adversaries prepared for regional war against the United States and its allies? How do they understand the strategic dimensions of such wars?
- How has the erosion of the U.S. conventional deterrence affected the potential dynamics of such wars?
- How should the United States and its allies understand the strategic dimensions such wars? Are they adequately prepared?


As Russia and China have a multi-dimensional approach to conflict with the United States that ranges across military, political, economic, and ideological domains, Roberts argues that the United States and its allies need a more coherent and robust set of ideas of their own. He proposes a Blue theory of victory for the United States and its allies as a necessary condition for strategic competence and strategic success against the Red theory of victory of Russia, China, and North Korea. At its core, Blue theory should focus on stripping away the confidence of leaders in Russia and China in their escalation calculus. It should also account for the requirements of deterrence in a second theatre from which assets might be stripped in times of crisis and war.

Covington explains four fundamental cultural pillars of Russian strategic military thought: strategic uniqueness; strategic vulnerability; going to war with all of Russia; and the decisiveness of the initial period of war. He argues that this culture of strategic thought provides President Putin with a strategic framework for Russia's most critical security and defense calculations in peace, crisis, and war. In the context of the geostrategic realities of the 21st century and the unrealities of President Putin's worldview, it poses an enduring, multi-dimensional challenge for the West, one that will impact Europe's long-term security.


Townshend and Crabtree contend that the US rhetoric that places Indo-Pacific at the top of Washington’s global priorities has been matched only partially with the actions and resources. They suggest that Washington will have to intensify its efforts on all three elements of U.S. strategy, namely prioritization, posture, and partnerships, if it seeks to have a favorable balance of power in the region amid China's growing capabilities and assertiveness. They argue that such efforts will require far more investments in U.S. capabilities and forward military presence as well as a sustained strategic discipline. It will also require doing more to empower and integrate allies and partners and allaying lingering doubts about Washington’s ability and willingness to invest in the military rebalance and deliver a credible deterrence strategy.


This CGSR workshop reviewed the extant thinking on de-escalation and war termination in modern regional wars involving nuclear-armed regional powers. One of the key takeaways of the workshop was that escalation and counter-escalation strategies are at the heart of the new approaches to war of Russia and China, who count on an asymmetry of stake (favoring them, as they perceive it) to induce U.S. de-escalation. In this way, they cast a growing nuclear shadow over regional conventional wars. To address this challenge, much can be done to accelerate the refinement and implementation of the emerging Blue theory of victory and to improve its grasp of the requirements of successful de-escalation and war termination.
This CGSR workshop discussed issues ranging from the challenges of winning a conventional regional war against a nuclear-armed adversary to having the right concepts and integrating them into a Blue theory of victory. The participants noted that the United States and its allies must do better at understanding the strategy, strengths, and vulnerabilities of the Red, and thinking about the supposedly unthinkable possibility of limited regional nuclear war. They must come to terms with the new Red-Blue-Green triangles in the new strategic landscape and define the political requirements of winning and then of linking operational concepts to those requirements.

Panel 5: Adapting Deterrence Strategy: Beyond the Traditional “Fundamentals?”

- What are those traditional fundamentals?
- Are changes warranted? If so, why? If not, why not?


This unclassified report to Congress summarizes the United States’ current approach to nuclear weapons employment. The report noted that the United States cannot assume that potential adversaries will see threats of large-scale nuclear responses as credible in all situations. Therefore, to strengthen the credibility of U.S. nuclear deterrence and extended deterrence, the United States will continue to field a range of nuclear and non-nuclear capabilities that provide U.S. leadership with options that can be tailored to deter potential adversaries, assure allies and partners, achieve U.S. objectives should deterrence fail, and hedge against an uncertain future. U.S. nuclear forces are designed to provide limited, flexible, and graduated response options. Such options demonstrate the resolve and the restraint necessary for changing an adversary’s decision calculus regarding further escalation.


This report reflects the Obama administration’s nuclear employment guidance, which was developed after a review of U.S. nuclear deterrence requirements. This review assessed the changes to nuclear employment strategy that could best support the objectives of U.S. nuclear weapons policies and the posture outlined in the 2010 NPR. In addition, the report discussed options that should be provided to the President in the event that deterrence fails. The report outlined a strategy for hedging against risk in the U.S. nuclear stockpile and maintaining the flexibility and resilience of U.S. strategic forces.
and supporting the United States' goals of nuclear deterrence, extended deterrence, assurance, and defense.


The authors note that the emergence of great power multi-domain strategic “toolkits” potentially provide the means to achieve decisive outcomes short of the nuclear threshold. It represents a significant break with earlier concepts that envisioned relatively few steps between the conventional and nuclear war in an escalating conflict. Bernstein and Long outline several framing considerations that are shaping and could further shape the U.S. approach to multi-domain deterrence. These considerations include the importance of defining deterrence tasks along a continuum of conflict; the character of multi-domain deterrence at the operational and strategic levels of war; and the trajectory of effort required to develop a mature, actionable concept of multi-domain deterrence.


The then-commander of U.S. Strategic Command notes that the global security environment today is characterized by a three-party nuclear peer dynamic in which China and Russia have shared objectives and deepening cooperation to undermine the rules-based international order. He argues that there is a need for an integrated deterrence strategy that adapts the U.S. strategic capabilities, capacity, and posture to keep pace with the evolving global threats. He calls for a reevaluation and readjustment of the missile defense posture, building capabilities to detect and track cruise missile and hypersonic attacks, and having responsive, persistent, resilient, and cost-effective joint integrated missile defense sensor capabilities. He also calls for integration based on a top-down architecture that synchronizes U.S., allied, and partner contributions and capabilities.


Krepinevich posits that China’s nuclear expansion forces the United States to contend with the deterrence requirements of a tripolar nuclear world. This dynamic resembles the “three body problem” in physics, where the orbits of three large astronomical bodies are chaotic and impossible to reliably predict in advance. In this precarious new strategic context, the United States must consider the requirements of deterrence and strategic stability and their implications for the U.S. force posture. The author argues that although the current U.S.
modernization plan is predicated on a bipolar system, it can readily be adapted to address challenges posed by a tripolar one.

**Panel 6: Adapting the Strategic Deterrent: Beyond “No New” Modernization?**

- Is the current modernization pathway adequate to meet plausible future requirements?
- What new factors might generate different requirements? How likely are they?
- What might be required that is new or different?


This CSIS brief summarizes the results of a workshop examining the development of new U.S. nuclear warhead designs, specifically those that would form the basis for U.S.-UK nuclear cooperation. The authors also provide an overview of the differences between the Obama and Trump administrations on the issue of no “new” nuclear capabilities. While the Obama administration pledged not to pursue new nuclear warheads or support new military missions or military capabilities for the weapons in the U.S. nuclear arsenal, the Trump administration’s Nuclear Posture Review directly challenged the notion of “no new capabilities.” Instead, it highlighted the “need for flexibility to tailor U.S. capabilities and strategies to meet future requirements and unanticipated developments,” and called for the creation of two new capabilities, a low-yield variant of the Trident D5 SLBM and a nuclear-armed sea-launched cruise missile (SLCM-N).


Harvey notes that over the next few decades the U.S. nuclear capabilities will be tested in very complex modernization programs that will involve the near-simultaneous replacement of every leg of the aging triad, a major upgrade to the command-and-control system, and recapitalization of the nation’s aging warhead production infrastructure. He argues that there is little flexibility to absorb further triad modernization delay without affecting robust nuclear deterrence in future years. Therefore, he suggests avoiding contentious debate on arms control as it can tear at the fabric of consensus on nuclear modernization, increasing focus on Russia, and building bipartisanship in the stewardship of the U.S. nuclear deterrent.
This CGSR workshop examined the existing U.S. modernization plans, the challenges that might obstruct their implementation, and the new deterrence requirements that might emerge in the future considering the modernization efforts of Russia and China. One of the key takeaways was that the United States and its allies can be cautiously optimistic that the U.S. nuclear posture will be fit for purpose in 2030. But there is a decent chance that modernization will not occur just-in-time and that capability gaps will result and that adaptations to the deterrent will be necessary but cannot be accomplished in a timely way.

Panel 7: Adapting the Theater Deterrent: Beyond Limited Incrementalism?

- Is the current modernization pathway adequate to meet plausible future requirements?
- What new factors might generate different requirements? How likely are they?
- What might be required that is new or different?


Takahashi examines how recent developments in the Chinese conventional and nuclear arsenal could affect strategic stability in the Pacific. Chief among the problems is China’s precision strike conventional arsenal that could degrade U.S. bases in the Pacific and interfere with U.S. ability to aid allies. The U.S. lacks options for degrading Chinese power projection capabilities for the duration necessary to mount a credible defense of U.S. allies, and the U.S. worries about the proximity of these resources to key sites in mainland China. Furthermore, China is expanding its number of MIRVed intercontinental ballistic missiles (ICBMs), which could hold increasing numbers of U.S. ICBMs at risk. The author is in favor of the United States deploying tactical nuclear weapons in the Pacific theatre to deter China from attacking U.S. bases because nuclear weapons pose a larger destructive threat to Chinese bases.


The authors argue that Japan must examine how it can contribute to the U.S.-Japanese alliance’s deterrence burden rather than leaving this responsibility to the United States. Japan should work more closely with the United States to tighten coordination on
capability development and burden sharing on offensive or defensive tasks. The alliance should increase the costs of conflict for China by deploying intermediate range missiles as well as other offensive strike and ISR capability, such as antiship missiles and hypersonic glide vehicles. This would allow it to manage escalation contingencies and give Japan more leverage in policy coordination conversations with the United States. Japanese deterrence can also be enhanced by preparing Japanese society to be resilient in future conflicts.


The author argues that Russia’s nuclear signalling in the war against Ukraine has brought nuclear deterrence back to the forefront of European security, reminding allies of the risks of nuclear coercion and escalation. Without NATO’s nuclear capabilities, European states would become largely defenceless against such threats. Therefore, limiting NATO’s defence policy discussions to hybrid threats, conventional deterrence, and arms control is inadequate; Europeans must refocus on nuclear deterrence and stop decoupling nuclear issues from other debates.


Discussion during Panel 5 of this CGSR workshop focused on whether the legacy U.S. nuclear umbrella is fit for purpose for an era of major power rivalry. Participants observed that some allies see the U.S. nuclear umbrella as leaky, that is, they see the United States as too timid in its nuclear policies and as dangerously reluctant to wield nuclear risk to the benefit of its alliances. These allies seek supplemental U.S. nuclear capabilities and new strategic initiatives from Washington that do more than just “fiddling at the margins.” The legacy nuclear posture is also inadequate because it does not account for future trends that might hamper extended deterrence and assurance. One solution to address this problem could be the re-regionalization of extended nuclear deterrence that would entail shifting greater responsibility for its credibility from strategic to regional level.

Panel 8: Adapting the Hedge: Beyond Upload?

- What kinds of risks should the United States hedge against in an eroded and eroding deterrence environment?
- How well hedged is the United States?
- If some part of the hedge is deployed in response to China’s growing force, how should the hedge be re-set?
The directors of the three U.S. nuclear weapons laboratories offer their 2030 vision of how the nuclear security enterprise should adapt to meet intensifying strategic competition. They note that the U.S. hedge posture is set to become stronger from some modernization, but it remains constrained by design capabilities and production capacities still scaled for benign life extension. They emphasize that to effectively compete on its own terms, the United States needs a nuclear security enterprise that has the innovative acumen, technological adaptiveness, production efficiency, and manufacturing scalability of America’s world-leading private sector manufacturers. While this vision is within reach, it requires a clear national commitment, a sense of urgency about the need to improve U.S. competitiveness, and a range of specific actions and investments.


Hingorani explores the additional burdens on the U.S. nuclear complex that would follow a geopolitical or technical surprise, arguing that hedge strategies as so far practiced have not yet adequately addressed the risk of strategic surprise. In order to prevent strategic surprise and hedge against challenges in future decades, the U.S. nuclear complex must build resilience into its tools, processes and people. A future oriented nuclear security enterprise requires resilient scientific and production infrastructure with the freedom to pursue cutting edge technology and decisive, cognitively diverse leadership able to stand up to scrutiny to identify incoming security challenges. The nuclear security enterprise should also explicitly plan for future uncertainty and have the capability to adapt to changes in the strategic environment and advances in technology.


Discussion during Panel 6 of this CGSR workshop centered on whether the U.S. nuclear hedge is well tailored for the existing and projected security environment and on whether there is a need to reset the hedge. One of the key takeaway was that the current U.S. approach to hedging addresses the potential for three kinds of surprise: geopolitical (e.g., a sudden political realignment leading to a new adversary), technical (e.g., a crippling problem with existing warheads or delivery systems), and technological
(e.g., a military application of a new technology that generates new nuclear requirements for the United States). In a more multipolar world, the potential for geopolitical and technological surprise is increased and the current U.S. hedging strategy is insufficient. This requires a standing capacity to rapidly design, certify, and build the weapons needed to meet potential new nuclear requirements.


One of the key takeaways of the panel 4 of this LLNL-LANL workshop was that the current U.S. nuclear hedge is largely based on maintaining reserve warheads ready to increase the United States’ numbers quickly in response to shifts in the geopolitical environment or technical issues. Still, even though China’s dramatic nuclear buildup is the type of geopolitical shift meant to be addressed by the U.S. hedge, there is barely enough capacity to fulfill current modernization and sustainment requirements. This requires the United States to refine its approach to hedging.

Panel 9: Adapting Arms Control: Beyond Reductions?

- How have legacy approaches adapted to new challenges?
- What further adaptations are necessary and plausible?
- What are the prospects for arms control in 2030?


Albertson argues that if arms control is to survive as a national security tool, it will be necessary to explain its ability and limitations in achieving U.S. deterrence and strategic stability goals in an era of great power competition. These goals are what ultimately should dictate the format of a potential agreement. In the next arms control agreement, it is necessary to look beyond simple numbers of launchers and warheads. Instead, the focus should be on the appropriate balance between factors such as depth, breadth, durability, cost, and complexity. Determining the optimal mix between these factors can improve consensus inside the U.S. interagency and improve prospects for an agreement.

The pursuit of viable long-term arms control strategies adapted to the current strategic environment should fully engage both the United States and its allies in Europe and Asia. Innovative arms control calls for more political will and leadership from all sides, but today it is most needed in allied capitals, where intellectual burden sharing is as important as military burden sharing. In order to rebuild momentum, it is necessary to enhance the human capital, engagement mechanisms and institutions required for developing arms control frameworks. At the same time, a willingness to compromise and find arms control solutions should not come at the expense of deterrence.


Williams argues that existing risk reduction tools are designed to prevent risks associated with misperception or inadvertent escalation. They are not tailored to the type of intentional escalation and risk-taking that President Putin has demonstrated with regards to Ukraine. In such scenarios, preventing further escalation and nuclear use will require strengthening deterrence and developing new risk reduction tools. While a strong U.S. nuclear deterrent has to remain the foundation to prevent intentional escalation by adversaries, the U.S. should also take a leadership role in developing a richer risk reduction toolkit that is shaped to reflect the current geopolitical landscape.


The CGSR workshop highlighted that nuclear and non-nuclear strategic competition is likely given the dynamics and the players, but each of the major powers has very different capacities to compete in an unconstrained environment. To meet this challenge, the United States must get its thinking straight in several key areas, primarily how it should compete in this environment with a better positioned Russia and China, both of which are led by personalist authoritarian leaders bent on changing global order. Arms control needs to be re-focused and re-branded for this coming interregnum, concentrating on identifying concrete problems that can be solved by mutually agreed solutions, determining where and how to incentivize or push Russia and China to participate, and preparing to compete from a position of strength should competitors reject cooperation.

Panel 10: Anticipating the Politics of Life Outside the Comfort Zone

- As the policy context becomes more dynamic and the choices more difficult, how will the domestic politics of nuclear policy be affected?
- Can a bipartisan consensus in support of strategy and posture be sustained in a three-peer environment?
- What can and should be done to lay the foundations for policy continuity?

This Congressional Research Service Report provides an overview of an evolution of the size and structure of the U.S. nuclear force, and of policy issues that are crucial for Congress. One of the author’s observations is that concerns over the expansion of China’s nuclear capabilities already animated the debate over whether and how the United States should alter its nuclear force in response. While one side of the debate argues that the United States should be prepared to expand its numbers of deployed nuclear warheads to meet the growing threats, the other side holds that that the existing U.S. force is more than adequate to deter Russia and China. Woolf also highlights that questions about the need for trade-offs in an environment of limited resources could again fuel debates about the scope of the U.S. nuclear modernization programs.


Harvey and Soofer observe that the Biden Administration committed itself to the longstanding bipartisan consensus on U.S. nuclear strategy that is based on maintaining a safe and effective nuclear arsenal while pursuing robust strategic stability and arms control dialogues with other nuclear states. The authors recognize that the revelations regarding the significant ramp-up of China’s ICBM force presents a thorny challenge for the United States and open up questions about existing U.S. nuclear doctrine, targeting, employment policy, and the size and composition of the U.S. nuclear forces that could affect future domestic consensus. Still, because China’s buildup will not be instantaneous, the United States has time to address these questions and develop answers.
Selected CGSR Workshops on Related Topics:

- Facing the Coming Arms Control Interregnum, August 2022
- The European security crisis and the future of deterrence, July 2022
- Strategic Weapons in the 21st Century, May 2022
- Extended Deterrence and the Two-War Problem, April 2022
- Multipolarity and US Nuclear Strategy, December 2021
- Strategic Weapons in the 21st Century. The U.S. Nuclear Deterrent in 2030 and Beyond: Fit for Purpose?, September 2021
- Setting Priorities for Deterrence Integration, August 2021
- Net Assessment and 21st Century Strategic Competition, June 2021
- The 2021 Defense Strategy Review and Modern Strategic Conflict, December 2020
- The Next U.S. Strategic Posture—And the Posture After Next, July 2020
- Fit for Purpose? The U.S. Nuclear Posture in 2030 and Beyond, June 2020
- Winning Conventional Regional Wars Against Nuclear-Armed Adversaries, November 2019
- Multi-Domain Strategic Competition: Rewards and Risks, November 2018

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