Recommended Background Reading

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Key Questions:

• What are the principal dangers and challenges in this new global setting?
• What decisions have been made to adjust the U.S. strategic posture?
• What further decisions are required, either to preserve or to pursue options?
• Has the nuclear security enterprise been successful in accelerating its adaptation to new requirements? What more is needed from it?

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Panel 1: Calibrating the Risks of War

- What are the potential pathways to crisis and war with Russia or China?
- Has the erosion of deterrence continued or stabilized?
- How do the leaders of Russia and China perceive the political resolve of the United States and its allies and partners to defend their interests if attacked?


This report identifies a number of lessons of the war in Ukraine for escalation risks and nuclear stability. In the future, Russia may turn to nuclear weapons to offset its conventional weakness, and it will also seek new ways to make its deterrent threats more credible. As a result of the war, European thinking on the role of nuclear weapons is changing, with more countries seeing nuclear weapons as critical to deterring Russia and seeking extended deterrence from the United States. However, there is a mismatch regarding the responsibilities for conventional deterrence.


The authors outline three competing theories about China’s nuclear buildup. First, China’s nuclear modernization efforts are an “overdue reaction” to U.S. nuclear posture and an attempt to maintain its deterrence credibility vis-à-vis the United States. Second, China’s nuclear buildup is aimed to erode U.S. relative advantages and increase China’s ability to threaten the United States. Finally, China’s modernization efforts were meant to facilitate its ability to fight a conventional or limited nuclear war.


The authors explore China’s likely reactions to various types of U.S. military activities. China is most likely to escalate in response to activities that involve Taiwan, or threaten regime survival. The aggressiveness of China’s responses to U.S. activities is not closely correlated with its actual level of concern but whether those activities threaten core interests. China’s sensitivity to Taiwan creates complications for the United States given its competing goals of defending the island and avoiding escalation with China.

Although some suggest that the United States should let its European allies handle the defense of their continent and instead focus on Asia, Kroenig argues that 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—planning to only defeat one enemy instead of two is planning to fail. Allies need to do more to share the burden of their defense, but the United States still needs to lead.

Panel 2: Calibrating the Challenges of Long-Term Competition

- How are Russia, China, and the United States competing for strategic advantage?
- Can Russia and China be dissuaded from taking further destabilizing actions? If so, how?
- What goals should guide a more competitive U.S. response to the nuclear challenges posed by Russia, China, and North Korea?


This report argues that NATO is competing with an adversary whose leadership is confident about its ability to prevail in long-term competition; that can act aggressively based on the wrong estimates of Russia’s relative strengths, weaknesses, and key asymmetries that Moscow could exploit against other countries; and whose net assessment of the evolving European military balance may be difficult to influence by the Alliance’s actions.


China’s nuclear modernization efforts have increased Beijing’s ability to deter and coerce the United States through an enhanced ability to threaten a first strike and retaliate with a more secure second-strike capability. Capabilities, however, do not explain China’s goals, which could include a desire to sustain assured retaliation, attain coercive leverage for a Taiwan conflict, and a shift toward a nuclear first use posture. The United States should “proceed with caution” until greater clarity is gained on China’s goals.
The threats posed by two near-peer competitors are driving a shift in U.S. defense planning. To understand and assess the current strategic landscape, this report proposes a new analytical framework. The authors argue that success in strategic competition requires a robust domestic foundation combined with a favorable alignment of global geopolitical power. Day-to-day competition requires sustaining economic strength, leadership in emerging technologies, and preserving U.S. influence in global institutions.


This workshop summary highlights how the competitive strategies of Russia and China have remade regional and global orders, and how the United States and its allies should join this competition. The United States was for a long time reluctant to accept and join the strategic competition brought to it by Russia and China. Having now done so, it has experimented with different approaches. So far, however, there has been little convergence on which competitive approach best serves U.S. interests.

Panel 3: The Nuclear Security Enterprise: Beyond the “New Normal”

- What is the “new normal” (as described by the Strategic Posture Commission)?
- What adaptations have been made to improve capacity and effectiveness?
- What further adaptations are needed and how can they be accomplished?


The Strategic Posture Commission warns that the United States faces a strategic problem requiring urgent action. A world with two nuclear peer competitors poses an existential challenge for which the United States is ill-prepared, unless its leaders make decisions now to adjust the U.S. strategic posture. While the fundamentals of America’s deterrence strategy remain sound, the United States lacks a comprehensive strategy and the force structure to address the 2027-2035 threat environment.

This testimony outlines the significant progress NNSA has made across the entire portfolio. The weapon modernization programs are delivering to the Department of Defense, and the production modernization and infrastructure initiatives are advancing with noticeable progress. Although there are plenty of challenges, the NNSA enterprise is delivering and creating new approaches to accelerate delivery. Going forward, NNSA’s priorities reflect a deteriorating international security environment, expanded mission demands, and challenges in building unique large nuclear facilities.


According to the testimonies, the United States finds itself in a highly dynamic and challenging security environment characterized by intensifying strategic competition, assertive behavior by multiple competitors, rapidly evolving domains of conflict, shifting balances of power, and, as a result, a growing risk of military confrontation. In response, the Department of Defense is committed to investing in the nuclear triad, homeland and regional missile defense, and a more resilient space architecture.


The post-Cold War era characterized by optimism that gave birth to stockpile stewardship has unfortunately given way to a period of intensifying competition and rivalry. The authors examine how the United States, Russia, and China approach the maintenance of nuclear deterrent in this changing security environment. This volume also highlights where their approaches align, and whether the asymmetries matter. The concluding chapter provides an evaluation of the competitiveness of the U.S. approach.
Panel 4: Exploring Beyond the Program of Record

- If the program of record is “necessary but not sufficient” (as the Commission concluded), what else is necessary?
- What additional supplemental capabilities are required by changes in the security environment?
- What should be done to prepare for delays in the modernization program?


The first part of this paper focuses on the new deterrence requirements of the changing security environment. The author argues that the United States will likely need a greater number of deployed nuclear warheads than the 1,550 permitted under the New START Treaty and additional, more flexible delivery systems—such as a nuclear-armed sea-launched cruise missile—to ensure that it can simultaneously deter conflict with both China and Russia at the strategic and regional levels.


This Occasional Paper includes a selection of essays—some focus on the eroding security environment and shifting national policy context, whereas others focus on the progress of the nuclear weapons complex in coming to terms with new challenges and some of the opportunities ahead. Taken together, they provide a comprehensive view of an enterprise gripped by the need to transform but struggling with many challenges, both legacy and new.


This volume aims to outline for the United States the best strategies to deter nuclear use by China and Russia. The authors argue that U.S. political and military leaders need to determine the nation’s strategy to deter and, if
necessary, defeat two nuclear peers simultaneously or in sequence. In doing so, leadership must also consider the implications for nuclear force posture, modernization, extended deterrence and assurance, and arms control and disarmament.

https://cgsr.llnl.gov/content/assets/docs/CGSR_Two_Peer_230314.pdf

The two nuclear peer problem is destined to become a test of the U.S. national capacity to meet new dangers in a timely and effective manner. Success would go a long way toward stripping away the confidence of Russia and China, and assuring allies and partners. But failure would go a long way too. If the United States proves incapable of adjusting to these new circumstances, its ability to shape the nuclear security environment will further decline. This would only fuel the perception in Beijing and Moscow of U.S. decline and retreat. It is in our collective interest that this not be so.