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The Dynamic Tripolar Strategic Balance: A Net Assessment

Annotated Bibliography

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The Dynamic Tripolar Strategic Balance: A Net Assessment

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Key Questions:

- By what metrics should the strategic balance be assessed?
- How dynamic is the balance? How fragile?
- Is the US gaining strategic advantage, losing it, or holding steady, overall?
- In order to gain new advantages or re-gain advantages lost, can or should the US prioritize some domains and accept more risk in others? If so, which ones?

Panel Topics:

1. Understanding the Challenge
2. Adversary Guideposts for Strategic Military Competition
3. Conventional Deterrence in a Two-Peer World
4. Deterrence in the Global Commons
5. The Tripolar Strategic Nuclear Equation
6. The Damage-Limitation Balance
7. The Theater Nuclear Balances
8. Competitive Hedging: Preparing for the Future
9. Setting US Priorities
10. Closing Roundtable

[1] *The views and opinions of authors expressed herein do not necessarily state or reflect those of the United States government or Lawrence Livermore National Security, LLC, and shall not be used for advertising or product endorsement purposes.*

Panel 1: Understanding the Challenge

- In the past, how did the US expert community understand the requirements of strategic balance? What concepts and metrics did it use?
- How well do these legacy concepts and metrics fit the more multipolar nuclear world, the more multi-domain character of modern conflict, and the prospects for long-term strategic competition?
- Are new concepts needed?

Michael Beckley, "The Power of Nations: Measuring What Matters," International Security, vol. 43, no. 2, pp. 7-44 (Fall 2018). https://doi.org/10.1162/ISEC_a_00328.

This article advocates for a "power as resources" approach, which involves looking at wealth and military assets, for measuring the balance of power. The power-as-resources approach is in contrast with "power as outcomes," which analyzes nonmaterial factors in how states attain victory and is often too specific and retrospective for assessing overall balance of power.

Eliot A. Cohen, "Net Assessment: An American Approach," Jaffee Center for Strategic Studies, Tel Aviv University (April 1990). https://www.inss.org.il/wp-content/uploads/2017/02/FILE1266490070-1.pdf.

This piece introduces the concept of net assessment. It argues that good analysis begins with choosing appropriate metrics based not merely on tactical criteria, but also both sides' operational styles and strategic requirements. Metrics must go beyond quantitative considerations to account for "the fundamental asymmetries between two potential opponents, including differences of organizational structure, political purpose, and operational objectives."

Robert P. Haffa Jr., "The Future of Conventional Deterrence: Strategies for Great Power Competition," Strategic Studies Quarterly (Winter 2018). https://www.airuniversity.af.edu/Portals/10/SSQ/documents/Volume-12_Issue-4/Haffa.pdf.

This article argues that implementation of conventional deterrence must change to accommodate the shift away from the bipolar, nuclear setting of the Cold War. To avoid deterrence failure, it is necessary to bolster visibility of military force, demonstrate willingness to use force, and follow through with force if deterrence fails. The author finds that conventional deterrence should be general rather than immediate, extended as opposed to theater-oriented, and overwhelming rather than gradual.

Eric Heginbotham, Michael Nixon, Forrest E. Morgan, Jacob L. Heim, Jeff Hagen, Sheng Tao Li, Jeffrey Engstrom, Martin C. Libicki, Paul DeLuca, David A. Shlapak, et al., "The U.S.-China Military Scorecard: Forces, Geography, and the Evolving Balance of Power 1996-2017," RAND (September 14, 2015). https://www.rand.org/content/dam/rand/pubs/research_reports/RR300/RR392/RAND_RR392.pdf.

This report provides scorecards for U.S. and Chinese military capabilities in ten operational areas. Metrics take into consideration inventory numbers, force structure, and vulnerabilities on both sides. The authors find distance to be a critical metric for measuring the military balance, with China's proximity to potential conflict complicating U.S. military

action. The report concludes that the gap between the Chinese People's Liberation Army and the U.S. military is narrowing, with many Chinese capabilities trending toward parity or advantage, to varying degrees.

Panel 2: Adversary Guideposts for Strategic Military Competition

- How do leaders in Beijing and Moscow understand and plan for strategic military competition with the US?
- What are their force development ambitions, both nuclear and non-nuclear?
- How do they conceive of force sufficiency? How much is enough? Why?

Kyle Balzer and Dan Blumenthal, "China's Continental Conundrum: Nuclear Geopolitics and American Strategy in the Western Pacific," American Enterprise Institute, June 2025, https://www.aei.org/wp-content/uploads/2025/06/RPT_Balzer-and-Blumenthal_Chinas-Continental-Conundrum-Nuclear-Geopolitics-and-American-Strategy-in-the-Western-Pacific_June-2025-copy3.pdf.

This article examines the strategic rationale behind China's nuclear expansion, arguing that U.S. analysts have overlooked the political and geopolitical context of Beijing's nuclear modernization. The Chinese Communist Party (CCP) aims to first dominate the western Pacific and then to diminish U.S. influence across Eurasia, while carefully avoiding actions that might trigger an all-out great-power conflict. The United States should treat China's nuclear strategy as a nuanced geopolitical instrument, and respond by leveraging political, economic, and military advantages to reinforce alliances and exploit China's vulnerability as a power constrained by geography and U.S.-led coalitions along its maritime borders.

Gerald C. Brown, "The PLA's Strategic Transformation: Forging a World-Class Nuclear Force" in The PLA's Long March Toward a World-Class Military: Progress, Obstacles, and Ambitions, eds. Benjamin Frohman and Jeremy Rausch, The National Bureau of Asian Research (October 27, 2025). https://www.nbr.org/publication/the-plas-strategic-transformation-forging-a-world-class-nuclear-force/.

This piece examines how China perceives a world-class nuclear force. The author argues that China's expanding nuclear arsenal does not necessarily signal a shift away from its longstanding doctrine of no-first use but nonetheless poses a threat to the United States and its partners and allies. The objectives of China's nuclear force have expanded beyond merely maintaining a secure second-strike capability to include strategically counterbalancing the United States and supporting national rejuvenation. The author assesses that China's nuclear build up supports its aims in unifying with Taiwan, specifically by limiting U.S. nuclear escalation options in a conflict.

Mark Cozad, Jeffrey Engstrom, Scott W. Harold, Timothy R. Heath, Sale Lilly, Edmund J. Burke, Julia Brackup, and Derek Grossman, "Gaining Victory in Systems Warfare: China's Perspective on the U.S.-China Military Balance," RAND (2023). https://www.rand.org/content/dam/rand/pubs/research_reports/RRA1500/RRA1535-1/RAND_RRA1535-1.pdf.

> This report examines China's views on the U.S.-China military balance and the drivers behind them. The authors find that although the PLA's capabilities are improving, China continues to see itself as the weaker side in the military balance. The PLA is a learning organization, and it has developed long-range precision strike, ISR, command and control, and automation capabilities in response to its historical experiences. However, the PLA continues to face systemic cultural issues such as corruption and bureaucratism, resulting in lower confidence by Xi Jinping in the PLA's reliability.

Dara Massicot, "How Russia Recovered: What the Kremlin Is Learning From the War in Ukraine," Foreign Affairs, vol. 104, no. 6 (November 2025). https://www.foreignaffairs.com/russia/how-russia-recovered.

> Russia has learned from its performance in Ukraine and institutionalized these changes in its procurement and training. This article assesses improvements in Russia's electronic countermeasures and missile defense systems, as well as its drone and missile strikes. Russia is prioritizing ways to counter large-scale armored assaults, including through uncrewed vehicles. However, Russian forces also continue to struggle with discipline and professionalism, in addition to suffering the effects of international sanctions.

Michael Petersen, Paul Schwartz, and Gabriela Iveliz Rosa-Hernandez, "Russian Concepts of Future Warfare Based on Lessons from the Ukraine War," CNA (July 2025). https://www.cna.org/reports/2025/08/Russian-Concepts-of-Future-Warfare-Based-on-Lessons-from-the-Ukraine-War.pdf.

> This report draws from Russian political and military sources to analyze evolution in Russian strategic and operational thinking over the course of the war in Ukraine. The authors find that technological advancements such as those in autonomous systems have led to tactical changes on the battlefield. However, Russian views on strategic concepts and operational doctrine appear not to have changed substantially. Russia remains focused on gaining an immediate advantage in the initial period of war. While Russia's military is formidable and learns continuously, the authors conclude that there is a gap created by improvements in Russian capabilities and the stasis in Russian strategic thinking.

Clint Reach, Vikram Kilambi, Mark Cozad, "Russian Assessments and Applications of the Correlation of Forces and Means," RAND (April 20, 2020). https://www.rand.org/content/dam/rand/pubs/research_reports/RR4200/RR4235/RAND_RR4235.pdf.

> This piece examines Russian assessments of the correlation of forces and means (COFM), a measure of military superiority between two opponents. The authors postulate that understanding of Russian COFM has deteriorated since the 1990s. Russia perceives the Western way of war as "noncontact warfare," with a greater focus on air and sea than on ground, which requires enhanced long-range precision munitions; unmanned aerial capabilities; command, control, communications, computers, intelligence, surveillance, and reconnaissance (C4ISR); and air-based electronic warfare.

Panel 3: Conventional Deterrence in a Two-Peer World

- Looking back a decade, has the deterrence position of US alliances in Europe and Asia improved or eroded? How? Why? How serious is the risk of opportunistic aggression?
- Looking ahead a decade, will projected developments in Red and Blue conventional warfighting capabilities combine to the advantage or disadvantage of the US and its allies and partners? Can Blue rapidly close gaps in its theater strike postures?
- What should be done?

Hal Brands and Evan Braden Montgomery, "Opportunistic Aggression in the Twenty-first Century," *Survival, Volume 62*. (July 2020)
https://www.tandfonline.com/doi/full/10.1080/00396338.2020.1792129

> This article explores the various forms and causes of opportunistic aggression, opportunities and challenges for Russia and China, and strategies for averting opportunistic aggression. Opportunistic aggression, when an adversary takes advantage of a power's pre-occupation elsewhere to strain their resources, has been a common tactic for centuries. In the twenty-first century, the United States faces the possibility of opportunistic aggression with two near-peer rivals. Adapting to meet this challenge in a practical manner given the United States' resource constraints will require more strategic clarity and focus within U.S. leadership.

Eric Edelman, Christopher Basslet, Toshi Yoshihara, and Tyler Hacker, "Rings of Fire: A Conventional Missile Strategy for a Post-INF Treaty World," Center for Strategic and Budgetary Assessments. (August 2022) https://csbaonline.org/uploads/documents/CSBA8325_(Rings_of_Fire)_FINAL_web-9-1-22.pdf

> The demise of the Intermediate-Range Nuclear Forces Treaty presents an opportunity for the U.S. to develop a comprehensive missile strategy with its allies. This report describes the missile balance in both Europe and the Indo-Pacific and prescribes pathways towards a coherent, long-term missile strategy. Employing a "three rings" concept, the authors examine deployment locations for short-, medium-, and intermediate-range missile systems and recommend optimal locations and strategies for operational utility.

Héloïse Fayet and Léo Péria-Peigné, "Deep Precision Strikes: A New Tool for Strategic Competition," *IFRI Studies, No. 121*. (November 2024) https://www.ifri.org/sites/default/files/2025-01/ifri_fayet_peria-peigne_deep_precision_strikes_2024.pdf

> This report describes the historical importance of deep precision strikes to target strategic sites and forces beyond the front line of conflict, culminating in the current importance of the capability not only in Ukraine, but also in the Asia-Pacific and Middle East. Adversary states and non-state actors alike have been developing increasingly sophisticated and numerous long-range strike capabilities, including hypersonic weapons and defense systems, to challenge U.S. and allied advantages.

Camille Grand, "Defending Europe with less America," European Council on Foreign Relations. (July 2024) https://ecfr.eu/publication/defending-europe-with-less-america/

> This article addresses Europe's reliance on the United States for key conventional capabilities and the urgent need for Europe to revitalize its defense industrial base to

continue to support Ukraine while maintaining a basic level of readiness for a potential future conflict with Russia. The author identifies a Russian and Chinese advantage vis-à-vis Europe in defense spending, driven by the persistent obstacles of resource challenges and institutional incoherence. NATO and the EU can bolster institutional understanding and create better partnerships to correct these gaps. Amid shifts in U.S. military priorities, Europe must be prepared to take on a greater role in the defense of the continent.

Jim Mitre, "A Eulogy for the Two-War Construct," *The Washington Quarterly, Volume 41*. (January 2019). https://www.tandfonline.com/doi/full/10.1080/0163660X.2018.1557479

This article argues that the two-war construct, used by the U.S. Department of Defense for conventional force planning against militarily inferior regional adversaries, does not suit the great power threat environment and conversely, distracts U.S. focus from quality of forces to quantity. The consequence is the failure of the U.S. to develop modern military forces capable of countering and staying ahead of Russia and China. The author points to the 2018 National Defense Strategy as a more appropriate framework to structure military force planning and account for greater uncertainty.

Panel 4: Deterrence in the Global Commons

- Looking back a decade, has the deterrence position of the US and its allies in cyber space and outer space improved or eroded? How? Why?
- Looking ahead a decade, how troubling are projected adversary developments?
- What should be done?

Zachary Burdette, "The U.S.-China Military Balance in Space," *International Security, Volume 49*. (May 2025). https://www.belfercenter.org/sites/default/files/2025-05/005-isec_a_00509-Burdette.pdf

This article addresses the growing concern in the United States about vulnerability in space, especially when compared to China. The author develops a framework for assessing the U.S.-China military balance in space, encompassing both dependence on space assets and resilience to counterspace attacks, and applies it to a Taiwan scenario. The threat assessment reveals that space capabilities may not play a decisive role in a Taiwan conflict scenario, but China's counterspace capabilities will reduce U.S. operational effectiveness.

Katherine E. Dahlstrand, "Securing Space Superiority: U.S. Deterrence Options in a Two-Rival Threat Environment," Center for Strategic and Budgetary Assessments, (October 2025). https://csbaonline.org/research/publications/securing-space-superiority-u.s-deterrence-options-in-a-two-rival-threat-environment

This report describes Chinese and Russian space capabilities, the potential for cooperation between the two countries, and U.S. deterrence in space. Chinese and Russian counterspace capabilities threaten to exploit vulnerabilities in U.S. space systems, disrupting U.S. fighting power during conflict. In the two-rival space environment, the United States must prepare to compete with and deter China and Russia simultaneously.

Louise Marie Hurel and Gareth Mott, "Rethinking Cyber Deterrence in a Multipolar World," Royal United Services Institute for Defence and Security Studies. (August 2025). https://static.rusi.org/rethinking-cyber-deterrence-in-a-multipolar-world_1.pdf

This paper calls for a new approach to cyber deterrence, supporting an integrated, cross-domain strategy. The authors argue that a range of tools across the government can improve the efficacy of the cyber domain to deter malicious cyber activity from Russia, China and non-state actors. The authors recommend developing tailored and actor-specific deterrence strategies, which incorporate cyber and non-cyber measures.

Caleb Withers, "Tipping the Scales: Emerging AI Capabilities and the Cyber Offense-Defense Balance," Center for New American Security. (September 2025). https://s3.us-east-1.amazonaws.com/files.cnas.org/documents/Report_Tipping-the-Scales_TECH_Sep-2025-Final.pdf

This piece highlights the ways that frontier AI could alter the cyber offense-defense balance by rendering defense more difficult and offense easier. AI's historic role has privileged defenders, but this balance may shift. The author argues that AI could raise the costs of defense through growing inference costs, streamline planning processes for cyber aggression, and privilege risk-acceptant attackers due to persistent challenges in model safety and reliability. The United States has an opportunity to proactively shape the landscape in favor of U.S. stability and security.

Panel 5: The Tripolar Strategic Nuclear Equation

- Is the tripolar nuclear balance becoming more or less stable? Why?
- Are we headed into a strategic competition in this domain and, if so, why should we care?
- Are new US strategic nuclear capabilities needed? If so, of what kind? When?

Douglas Barrie and Timothy Wright, "Not More, But More Assured: Optimising US Nuclear Posture," Global Politics and Strategy 66, no. 4 (2024): pp. 7-28. https://doi.org/10.1080/00396338.2024.2380194

This article argues that the United States can achieve deterrence more effectively by optimizing force structure, modernizing delivery systems, and enhancing command-and-control resilience, rather than simply increasing warhead quantities. The United States faces two major nuclear rivals: China, whose nuclear warhead holdings and delivery systems are rapidly expanding, and Russia, who retains a strategic arsenal comparable to that of the United States. The authors argue that force modernization should include low-yield and flexible nuclear options that enable the United States to reduce escalation risks and tailor deterrence signals by offering an option somewhere between conventional fighting and high-end strategic warfighting.

Caroline Dorminey and Eric Gomez, America's Crossroads: A Forward-Looking Anthology, CATO Institute, 2019, https://www.cato.org/sites/cato.org/files/pdfs/americas-nuclear-crossroads-full.pdf.

This report examines contemporary nuclear policy issues, including managing modernization costs, missile defense implications, the potential of conflict in the space

domain, great-power competition with Russia and China, threats posed by North Korea and Iran, the future of U.S. extended deterrence, and emerging technologies such as hypersonic weapons and missile defense systems. Overall, the volume advocates for a U.S. strategy that prioritizes risk reduction, arms control renewal, and strategic flexibility.

Adam Mount et al., "Understanding the Two Nuclear Peer Debate," Federation of American Scientists, September 2025, https://fas.org/wp-content/uploads/2025/09/0916-PCRN-report.pdf.

This report explores what is meant by the "two nuclear peer" challenge and the extent to which the emerging challenge is one that requires adjustments to U.S. nuclear strategy and capabilities. It explores options for adjusting U.S. nuclear posture and capabilities, arguing that what adjustments the U.S. makes should be determined by its strategy, its tolerance for risk, and its assessment of the likelihood Russia-China alignment, among other factors.

Vipin Narang and Pranay Vaddi, "How to Survive the New Nuclear Age," Foreign Affairs, June 24, 2025, https://www.foreignaffairs.com/united-states/how-survive-new-nuclear-age-narang-vaddi.

This article argues that the United States now faces an increasingly complex nuclear landscape which brings deterrence to the forefront of U.S. national security policy. This new era presents the U.S. with the possibility of coordination or collusion among nuclear antagonists, the growing alignment of China and Russia, and the potential development of nuclear arsenals by U.S. allies. To compensate, the United States modernize and diversify its arsenal to restore flexibility, credibility, and resilience in an increasingly multipolar nuclear order.

Robert Peters, "The U.S. Nuclear Arsenal of 2025: A Proposal for American Survival," Heritage Foundation, October 3, 2025, https://www.heritage.org/defense/report/the-us-nuclear-arsenal-2050-proposal-american-survival.

This report argues that current U.S. nuclear force posture is insufficient to meet the demands of an increasingly deteriorating security environment. An effective arsenal must satisfy four requirements: 1) equip the President with choices that can prevent or respond to an adversary attack during crisis or conflict; 2) provide opportunities to tailor attacks according to potential adversaries; 3) credibly assure deterrence to allies under the American nuclear umbrella; and 4) hedge against future threats. To that end, the United States should deploy ~3,500 operationally deployed strategic weapons and ~1,125 operationally deployed non-strategic weapons.

Brad Roberts et al., "China's Emergence as a Second Nuclear Peer: Implications for U.S. Nuclear Deterrence Strategy," Center for Global Security Research, March 2023, https://cgsr.llnl.gov/sites/cgsr/files/2024-08/CGSR_Two_Peer_230314.pdf.

This report argues that the United States confronts a fundamentally different nuclear environment as China approaches peer-status with Russia in strategic nuclear forces and aligns increasingly with Moscow, creating a "two-peer" challenge for U.S. deterrence. To remain credible, U.S. nuclear policy must adapt its hardware (deployment of new systems and capabilities) and software (alliance structures, war-fighting planning) to deter or confront two major nuclear adversaries simultaneously.

Caitlin Talmadge, "Multipolar Deterrence in the Emerging Nuclear Era," in Scott D. Sagan and Vipin Narang, The Fragile Balance of Terror: Deterrence in the Nuclear Age (Ithaca: Cornell University Press, 2023), pp. 13-38, https://muse.jhu.edu/pub/255/oa_edited_volume/chapter/3295413.

This chapter argues that the emerging three-way competition among the United States, Russia, and China complicates arms control, alliance dynamics, and extended deterrence commitments, and this new nuclear weapons environment is more likely to exacerbate instability and create complex policy dilemmas for managing both global and regional deterrence. However, the increased uncertainty in a world with multiple independent, rival nuclear states may marginally strengthen the stabilizing effects of nuclear weapons by reinforcing caution and restraint among adversaries.

Panel 6: The Damage-Limitation Balance

- How robust is the current US combination of homeland missile defense, conventional precision strike, and nuclear counterforce relative to the nuclear forces of Russia and China?
- What are Russia, China, and North Korea doing to defeat US DL strategy and otherwise improve their retaliatory postures? Is it consequential for the US?
- What is the US doing to sustain its strategy? What more should be done, if anything?

James Acton, Optimal Deterrence: How the United States Can Preserve Peace and Prevent a Nuclear Arms Race with China and Russia, Council on Foreign Relations (June 18, 2025) https://www.cfr.org/report/optimal-deterrence

This article contends that the United States "faces growing dangers of nuclear escalation, a new arms race, and proliferation," making it difficult to focus on counterforce targeting. The report argues that an "improved" strategy for the U.S. focusing on "optimal deterrence" should "cease, and declare it has ceased, the targeting of adversaries' nuclear forces, command control systems, and leadership, and instead focus exclusively on conventional military forces and war supporting industry."

Christopher Clay, "Survivability in the New Era of Counterforce," in Scott D. Sagan and Vipin Narang, The Fragile Balance of Terror: Deterrence in the Nuclear Age (Ithaca: Cornell University Press, 2023), https://muse.jhu.edu/pub/255/oa_edited_volume/chapter/3295331

This chapter discusses whether approaches to counterforce have really changed in light of technological advancements. It argues that counterforce aspirations are unlikely to be realized. Technological advancements have happened before, from spy satellites to MIRVs, but they have not resulted in nuclear forces being substantially more vulnerable. This is because it is cheaper to hide nuclear assets and get around counterforce measure than it is to deploy the counterforce measures themselves.

Masao Dahlgren, Countermeasures, Penetration Aids, and Missile Defense, CSIS Missile Defense Project (October 17, 2025). https://missilethreat.csis.org/countermeasures-penetration-aids-and-missile-defense/

This article includes a historical account of efforts to pursue counterforce capabilities in the United States and the Soviet Union. The author puts forward a taxonomy of different

approaches from replicas and chaff to preemptive attacks that have been used to counter missile defense. This historically rooted analysis is then used to inform how North Korea and Iran may approach countermeasures.

Brad Roberts, "Counterforce in Contemporary U.S. Nuclear Strategy" Center for Global Security Research (May 2025). https://cgsr.llnl.gov/sites/cgsr/files/2025-05/2025-0529-CGSR-Occasional-Paper-Counterforce-In-Contemporary-US-Nuclear-Strategy.pdf

This volume features a series of chapters engaging with a renewed debate about "whether to retain, reduce, or abandon a role for counterforce strikes in U.S. nuclear strategy." The chapters discuss a number of topics related to counterforce, including exploring definitions, history, and the views of allies. Overall, the report is favorable to counterforce as an element of U.S. nuclear strategy, arguing that it contributes to deterrence, stability, and the assurance of allies and partners.

Robert Soofer, 'First, we will defend the homeland': The case for homeland missile defense, The Atlantic Council (January 4, 2025). https://www.atlanticcouncil.org/in-depth-research-reports/report/first-we-will-defend-the-homeland-the-case-for-homeland-missile-defense/

This report outlines the importance of homeland missile defense in U.S. defense strategy. It argues that the United States may not even be able to maintain an advantageous position "against North Korea and potentially Iran" with "currently planned missile defense capabilities" and thus needs to significantly expand U.S. capabilities. The report argues that ballistic missile defense does not need to be impenetrable, rather it should be view as a supplement to offensive conventional and nuclear forces.

Do Young-Lee, "Growing Divergence: North Korea's Evolving Nuclear Strategy and the US–South Korea Alliance" Texas National Security Review (Fall 2025). https://tnsr.org/volume-8-issue-4/

This article discusses a mounting decline in South Korea's public confidence in US extended deterrence. The author contends that South Koreans believe that North Korea's actions mean that an invasion from the north has increased, that more US troops are needed in South Korea, and there is a "need to significantly enhance the specificity of US commitments." This disagreement has led South Koreas to "believe that the US is downplaying the significance of North Korea's evolving nuclear capabilities and posture, and failing to take appropriate measures to address the new threats this development poses."

Panel 7: The Theater Nuclear Balances

- Is the asymmetric nuclear posture of the US in both Europe and Asia fit for purpose? Why? Why not?
- Looking ahead a decade, how troubling are projected developments in relevant Red and Blue military capabilities?
- What should be done?

Justin Anderson and James R. McCue, Deterring, Countering, and Defeating Conventional-Nuclear Integration, Strategic Studies Quarterly (February 25, 2021). https://www.airuniversity.af.edu/Portals/10/SSQ/documents/Volume-15_Issue-1/Anderson.pdf

This article argues that given the integration of nuclear and conventional weapons concepts for fighting future wars among potential adversaries, the US and its allies should also develop concepts for integrating nuclear and conventional forces. The approach should not be mirror-imagined, however. Rather, the integration of conventional with nuclear forces "is to convince potential adversaries that integrating conventional and nuclear-capable forces grants insufficient advantages."

William Chambers et al., "An Assessment of the U.S.-Russia Nonstrategic Nuclear Weapons Balance" Institute for Defense Analyses (January 2021). https://www.ida.org/-/media/feature/publications/a/an/an-assessment-of-the-us-russia-nonstrategic-nuclear-weapons-balance/p-14248.pdf

This report discusses the relative balance of nonstrategic nuclear weapons in Russia and the United States. It exports how the asymmetry may play into the potential decision-making processes in Moscow and NATO, as – for example – "Moscow may think that the costs of a theater nuclear war fought with NSNW are bearable and to its advantage, making it more likely to take nuclear risk and, if necessary, conduct nuclear strikes."

Paige Glasser, "Toward a New Strategic Approach to U.S. Extended Nuclear Deterrence" Center for Global Security Research (August 2025). https://cgsr.llnl.gov/sites/cgsr/files/2025-09/Toward%20a%20New%20Strategic%20Approach%20to%20U.S.%20Extended%20Nuclear%20Deterrence-WEB.pdf

This paper argues US extended deterrence is at a "critical juncture" as a result of two nuclear peers, advancements in technology, and changing dynamics in alliances. Current approaches are not fit for purpose and will not be able to effectively deter in either Europe or Asia. The paper argues "the US and its allies must" follow six steps: 1) "adopt a comprehensive view of the threat," 2) "leverage alliances as essential multipliers," 3) "assess and rebalance collective capabilities," 4) "prioritize procurement and capability development," 5) "enhance interoperability and joint planning," and 6) "strengthen communications and signaling."

David Kearn, Limited nuclear war and the defense of Taiwan, Journal of Strategic Studies (October 24, 2025). https://www.tandfonline.com/doi/full/10.1080/01402390.2025.2572643

This article explores whether a credible threat of first-use tactical nuclear weapons can credibly deter Beijing from invading Taiwan. The author contends it is unlikely to deter China. Should the US ever follow this policy, the author contends that this would lead to

"dangerous escalatory dynamics" during a conflict. Far from limiting the conflict to a regional level, it could well lead to an escalation beyond the Taiwan Strait or in target selection. Relying on nuclear first use threats would also potentially unsettle regional allies and make non-proliferation efforts more difficult.

Greg Weaver, "The imperative of augmenting US theater nuclear forces: An examination of alternatives" Atlantic Council (March 2025). https://www.atlanticcouncil.org/in-depth-research-reports/issue-brief/the-imperative-of-augmenting-us-theater-nuclear-forces/

This paper argues that the two peer environment makes modernizing US theater nuclear forces an "imperative" as they are inadequate in both theaters and not fit for purpose. US's theater nuclear forces are vulnerable to attack, reliant on airpower to be deployed, and have limited range compared to other types of assets that can be used. The report concludes that the United States should make preexisting forces more survivable, as well as deploy SLCM-Ns and GLCM-Ns continuously to Europe and Asia.

Panel 8: Competitive Hedging: Preparing for the Future

- Looking back a decade, what has the US done to maintain and improve the national capacity to surge more and new capabilities, both nuclear and non-nuclear, in response to surprise or crisis? What lessons stand out from this experience?
- Looking ahead a decade, is its competitive position relative to Russia and China likely to improve or erode? Why?

Seth G. Jones, Empty Bins in a Wartime Environment: The Challenge to the U.S. Defense Industrial Base (Washington, DC: Center for Strategic and International Studies, 2023). https://csis-website-prod.s3.amazonaws.com/s3fs-public/2023-01/230119_Jones_Empty_Bins.pdf?VersionId=y_iEwCalRVFiVedETHwrcuwDaenf7zez

This report argues that the U.S. defense industrial base is significantly underprepared for a high-intensity, prolonged conflict. U.S. munitions stockpiles—especially long-range precision-guided weapons—could be exhausted in less than a week in a Taiwan scenario. The report highlights structural deficiencies: lean "just-in-time" manufacturing, fragile supply chains, limited surge capacity, and overreliance on commercial inventories. It recommends that the Department of Defense, in coordination with Congress, urgently develop a replenishment and surge production plan, streamline acquisition and export controls, and build resilience across allied and partner industrial bases.

Thomas G. Mahnken, Travis Sharp, and Tyler Hacker, Decisive Decade: U.S. Defense Strategy for a Post-Pandemic World (Washington, DC: Center for Strategic and Budgetary Assessments, 2023). https://csbaonline.org/uploads/documents/CSBA8352_(Decisive_Decade_Report)_FINAL_web.pdf

This report argues that China's state-directed civil–military fusion and long-term industrial mobilization have allowed it to close gaps in key technologies, while the United States remains constrained by slow acquisition processes, fragile supply chains, and insufficient coordination between commercial innovation and defense priorities. The authors urge Washington to integrate industrial policy more deliberately with defense strategy, strengthen cooperation with allies, and invest in emerging technologies and production

resilience. They conclude that sustaining U.S. competitive advantage will depend on revitalizing the defense industrial base and adapting innovation systems.

Aaron R. Miles, Implementing the Hedge Strategy in the 2018 Nuclear Posture Review (Livermore, CA: Center for Global Security Research, 2019). https://cgsr.llnl.gov/sites/cgsr/files/2024-08/NPR_hedge_planning_final.pdf

This paper explores how the 2018 Nuclear Posture Review (NPR) integrates "hedge planning" into U.S. nuclear strategy, focusing on five core force-attributes: survivability, penetration, prompt response, visibility, and range of warhead yields. These must be preserved in the face of technological or geopolitical surprise. An assessment is made of how U.S. force-structure alternatives perform under potential stressors and concludes that measured enhancements (e.g., low-yield SLBMs and SLCMs) rather than wholesale capability expansion are sufficient to maintain deterrence.

Michael E. O'Hanlon and Alejandra Rocha, "Strengthening America's defense industrial base," Brookings Institution (June 20, 2024). https://www.brookings.edu/articles/strengthening-americas-defense-industrial-base/

The authors argue that while the U.S. defense industrial base remains fundamentally strong, significant vulnerabilities persist, particularly concerning supply-chain dependencies, limited surge production capacity, a declining supplier base, and a shrinking skilled workforce. They trace how post-Cold War reductions in defense spending and an implicit "hands-off" industrial-policy posture contributed to structural fragilities, noting that critical inputs (such as non-fuel minerals) are heavily import-dependent and that key manufacturing infrastructure has aged. The authors recommend that the U.S. government move beyond laissez-faire assumptions by incentivizing spare production capacity, expanding stockpiles of critical materials, deepening collaboration with allies, lowering barriers for new entrants into the defense ecosystem, and treating industrial-base resilience as a top-tier national-security priority.

Brad Roberts, Inflection Point: How to Address the Defense Industrial Base Challenge (Livermore, CA: Center for Global Security Research, 2023). https://cgsr.llnl.gov/sites/cgsr/files/2024-08/cgsr-inflection-op-fullbook-10-04-2023-v4-web.pdf

This volume of essays argues the United States is at a strategic "inflection point" in its nuclear-security enterprise. The contributors examine how broad geopolitical shifts, emerging technologies, and a renewed great-power competition environment (particularly involving China and Russia) are eroding existing nuclear deterrence paradigms and stressing the institutions, infrastructure, and doctrine of the U.S. nuclear complex. Important themes include the need to modernize the nuclear triad and supporting industrial base, the risk of misperception and escalation in a multipolar nuclear era, the challenge of integrating commercial-innovation ecosystems with governmental stockpile stewardship, and the imperative to rethink arms control, non-proliferation, and deterrence in light of a transformed security environment.

Panel 9: Setting US Priorities

- What are the most important military competitions that the US must prioritize to maintain a strategic military posture that is fit for purpose? Why?
- Can it afford to take (more) risk in other domains to enable such prioritization? If so, which one(s)?
- What goal should guide the development of the resulting mix of capabilities? Dominance? Parity? Second to none? Strategic stability? Other?

Bryan Clark and Dan Patt, Airpower for the Post-Dominance World: Restoring US Air Superiority Through a New Combined Arms Approach (Washington, DC: Hudson Institute, September 18, 2025). https://www.hudson.org/missile-defense/airpower-post-dominance-world-restoring-us-air-superiority-through-new-combined-bryan-clark-dan-patt

This report argues that advancing adversary capabilities have rendered the traditional U.S. air-dominance model obsolete. They explain that the U.S. Air Force can no longer rely on sheer numerical or qualitative superiority of crewed fighters or bombers. Instead, the authors propose a three-part force-design comprising an edge force (small, mobile units with low signature systems and uncrewed assets), a pulse force (long-range strike platforms launching time-sensitive salvos from safe bases), and a core force (the traditional inventory held for later phases). The phased employment of these elements is designed to better address missile-rich contested environments, protect U.S. assets, and impose dilemmas on adversaries.

Ionut C. Popescu, "Adapting US Defense Strategy to Great-Power Competition," U.S. Army War College (March 20, 2025). https://publications.armywarcollege.edu/News/Display/Article/4129357/adapting-us-defense-strategy-to-great-power-competition/

This article argues that U.S. defense strategy must be recalibrated to reflect the realities of a great-power competition era especially regarding Taiwan and the Indo-Pacific. It identifies five strategic pillars: (1) prioritizing a "deterrence by denial" posture against People's Republic of China, (2) centering military planning on high-intensity war rather than irregular conflicts, (3) making the Taiwan contingency the main driver of force posture and acquisitions, (4) focusing naval/sea-power competition in the Indo-Pacific, and (5) aligning U.S. budgeting with strategic realities, making hard trade-offs to back the China challenge.

Melanie W. Sisson and Dan Patt, "After primacy: US military options in contemporary East Asia," Brookings Institution (December 20, 2024). https://www.brookings.edu/articles/after-primacy-us-military-options-in-contemporary-east-asia/

This report argues that while military force remains a tool of influence and security, it must be used with far greater selectivity, taking into account constrained resources, increased adversary capabilities, and elevated risks of escalation. It proposes that U.S. policy should instead pivot toward alternative military strategies and operational concepts, rather than assuming past methods will continue to succeed. Choices about when, how, and why to employ U.S. force must reflect a more contested security environment: one in which the military balance is tighter, regional partners have evolving interests, and non-kinetic or "grey-zone" challenges may be as consequential as open warfare.

Alexander Velez-Green and Robert Peters, The Prioritization Imperative: A Strategy to Defend America's Interests in a More Dangerous World (Washington, DC: The Heritage Foundation, August 1, 2024). https://www.heritage.org/sites/default/files/2024-09/SR288_0.pdf

This report argues that with the shifting global security environment marked by rising great-power competition, diversified threats, and constrained resources, the United States must adopt a ruthless prioritization strategy to defend its national interests. Maintaining a vast set of evenly balanced capabilities is no longer feasible; instead, the U.S. should focus on a narrow set of critical missions such as nuclear deterrence, missile defense, and space superiority, then proceed to align resources, procurement, and production around those priorities.

Panel 9: Closing Roundtable

- Is the US gaining strategic advantage, losing it, or holding steady, overall?
- Is the overall US approach to strategic military competition coherent, effective, and promising of future success? If not, what needs to be done?

Madelyn R. Creedon et al., "America's Strategic Posture: The Final Report of the Congressional Commission on the Strategic Posture of the United States," Institute for Defense Analyses, October 2023, https://www.ida.org/research-and-publications/publications/all/a/am/americas-strategic-posture.

The Commission concludes that the Untied States must reform its defense strategy, force structure, and deterrence posture to address the two nuclear peer threat during the 2027-2035 timeframe. The report calls for expanding nuclear modernization programs across delivery systems, warheads, and command-and-control infrastructure, while enhancing non-nuclear capabilities like space resilience, missile defense, and long-range precision strikes. The implementation must adapt to simultaneously deter nuclear and conventional challenges in Europe and Asia.

Jane Harman et al., "Commission on the National Defense Strategy," RAND, July 29, 2024, https://www.rand.org/nsrd/projects/NDS-commission.html.

The Commission finds that the 2022 National Defense Strategy does not position the United States to effectively deter. adversaries. Neither the 2022 National Defense Strategy nor the 2022 National Security Strategy presents a plan for integrated deterrence. The report recommends adopting a "Multiple Theater Force Construct" capable of deterring simultaneous threats, reforming the U.S. industrial base to rapidly deliver capabilities suitable for peer competition, and strengthening the role of alliances in national defense strategy.