

# The New American Nuclear Consensus—and Those Outside It

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## KEY TAKEAWAYS

U.S. forces and capabilities—very much including the nuclear deterrent—are far from where they need to be to meet growing and dynamic global threats.

Yet, the United States is failing at even that modest nuclear modernization plan, much less in building the arsenal it needs to deter China and Russia in the 2030s.

A new U.S. mainstream recognizes that now is not the time for treaty-based arms reductions with Russia and China, but for a ramped-up nuclear arsenal.

Since the end of the Cold War, the American nuclear policy community has had periods of consensus and periods of divergence. With the dissolution of the Soviet empire, arms-control treaties that reduced nuclear stockpiles, such as the START II treaty under President George H. W. Bush, Cooperative Threat Reduction programs under President Clinton, and the Treaty of Moscow under President George W. Bush, enjoyed broad support.<sup>1</sup>

By the mid-2000s, however, fractures emerged within the nuclear policy community. The George W. Bush Administration sought to develop new nuclear capabilities to hold emerging or potential nuclear powers at risk, such as North Korea and Iran, while recapitalizing the infrastructure within U.S. nuclear complexes that built nuclear weapons.<sup>2</sup> In 2008, the United States elected President Barack Obama, who

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promised to reduce the role of nuclear weapons in national security, with an eye toward eventual global nuclear disarmament.<sup>3</sup>

In 2010, President Obama and Republican Senator Jon Kyl of Arizona compromised to ratify a nuclear-arms treaty with Russia that reduced the strategic nuclear arsenals of each side, with the promise of follow-on negotiations with Russia to address non-strategic nuclear weapons, along with a long-term program to recapitalize the American nuclear enterprise.<sup>4</sup>

That compromise, however, did not hold the nuclear policy community together for long. By the 2010s, the community became increasingly disjointed. The nuclear policy community could be categorized into three main groups: nuclear realists, nuclear arms controllers, and nuclear disarmers. *Nuclear realists* sought a larger and more diversified nuclear arsenal to tailor deterrence against growing threats from Russia and, increasingly, China. *Nuclear arms controllers* emphasized arms-control measures, particularly legally binding treaties, to strengthen strategic stability and dissuade Russia and China from pursuing additional nuclear buildups. This group did not necessarily oppose U.S. nuclear modernization but was skeptical of any increase in numbers. Finally, *nuclear disarmers* sought to rid the world of nuclear weapons and wanted the United States to lead by example by cutting the size of the American arsenal.

In the 2010s, President Obama retired the submarine-launched nuclear Tomahawk missile.<sup>5</sup> Russia invaded Ukraine for the first time in 2014 and annexed Crimea. During this same period, North Korea continued to develop its nuclear program while the Chinese conventional military buildup took off.<sup>6</sup> During this period President Obama also signed the Joint Comprehensive Plan of Action to ostensibly prevent Iran from becoming a nuclear power—an agreement terminated by President Trump.<sup>7</sup> By 2018, the Trump Administration proposed two supplements to the Obama-era nuclear modernization program: a low-yield ballistic missile capability and a theater-range nuclear sea-launched cruise missile (SLCM-N) to address growing theater nuclear threats in Russia and China.<sup>8</sup>

By the late 2010s and early 2020s, some arms controllers began to sour on the prospects of new or sustained arms-control treaties with Russia.<sup>9</sup> Indeed, citing years of violations of the Intermediate Range Nuclear Forces Treaty (INF) by Russia, which had been developing and fielding nuclear-capable intermediate range missiles, the Trump Administration withdrew from the INF Treaty in 2018—to the quiet applause of many arms controllers.<sup>10</sup> Still, divisions remained within the nuclear policy community.

Early in his Administration, President Biden expressed a desire for additional nuclear arms control treaties with both Russia and China and cancelled the SLCM-N program established by President Trump.<sup>11</sup>

But a funny thing happened in 2023—by a bipartisan vote, Congress (including a great many Democrats) reinstated the SLCM-N program to the defense budget.<sup>12</sup> While nuclear disarmers condemned the program, many arms controllers quietly applauded or acquiesced to the continuation of the nuclear-cruise-missile program.<sup>13</sup>

By the fall of 2023, it was clear that something extraordinary had happened. A new mainstream within the American nuclear policy community had emerged.

## The World Becomes Much Less Stable

What happened between the election of President Biden and the fall of 2023? The world became much less stable and much more dangerous.

Russia, of course, invaded Ukraine for a second time in February 2022. Vladimir Putin almost immediately began threatening to use nuclear weapons against Ukraine, the United States, and much of the North Atlantic Treaty Organization (NATO).<sup>14</sup> Russia suspended the New START treaty, which capped the number of strategic nuclear weapons in the United States and Russia.<sup>15</sup> Moscow also “de-ratified” the Comprehensive Test Ban Treaty, the international treaty that prohibits states from engaging in nuclear weapons testing.<sup>16</sup>

These actions, coupled with Russia’s movement of theater nuclear weapons into Belarus, reminded many that while Russia and the United States have the same treaty-accountable number of strategic nuclear weapons, Russia has 2,000 non-strategic nuclear weapons against the 200 or so non-strategic nuclear weapons in the American arsenal.<sup>17</sup> The idea that Putin might make good on his numerous threats and use non-strategic nuclear weapons during the Ukraine war became a real concern by late 2022.<sup>18</sup>

All this made many in the arms-control and nuclear-realist communities wonder if Russia would pursue a nuclear breakout to offset its conventional weaknesses in the aftermath of its stalled Ukrainian war.<sup>19</sup> They also wondered if the United States would face a Russian bear that enjoyed not just overwhelming non-strategic nuclear advantage, but strategic nuclear advantage as well.

Meanwhile, in China, the situation worsened. Over the past 10 years, Xi Jinping has become the most powerful ruler of China since Mao Zedong, essentially setting himself up as dictator for life, while at the same time securing control over the Chinese military, government bureaucracy, and the Chinese Communist Party. Xi made it clear that he wanted the Chinese

military to have the ability to seize Taiwan during his lifetime and has supported the world's largest and most comprehensive military buildup of ships, planes, and missiles.<sup>20</sup>

As part of this buildup, China began a “breathtaking” expansion of its nuclear arsenal.<sup>21</sup> In the summer of 2021, satellite imagery discovered that China was building more than 300 missile silos in its western desert.<sup>22</sup> By the fall of 2023, the U.S. Defense Department’s unclassified *China Military Power Report* noted that in the past 12 months, China had built at least 100 nuclear weapons, and that it was seeking to build not only nuclear-armed missiles capable of targeting ships and bases from Japan to Australia, but new, nuclear-capable long-range bombers and ballistic missile submarines.<sup>23</sup> The report even noted Chinese interest in putting nuclear weapons in orbit on an orbital bombardment system.

This led analysts both in and outside government to conclude that China would reach strategic nuclear parity with the United States by the early 2030s.<sup>24</sup> The only question seemed to be: Would China be satisfied with nuclear parity with the United States—or would it seek nuclear advantage?

By the fall of 2023, the world system seemed to be slowly disintegrating—the war in Ukraine was going on for longer than anyone anticipated, with casualties on both sides numbering in the hundreds of thousands. Munitions stockpiles in the United States and among its European allies and partners, which have been supplying Ukraine, dwindled as the rate of munitions expenditure far outstripped the rate of replacement.<sup>25</sup> Hamas’s vicious attack on Israel—and Israel’s inevitable counteroffensive—only added to the sense of a world aligning with autocrats on one side opposed by liberal democracies on the other.

## The State of the U.S. Deterrent

Given all this, what is the state of the American military’s ability to deter adversary military adventurism? The short answer is that U.S. forces and capabilities are far from where they need to be.

More than 20 years of the War on Terror focused the military on counter-insurgency operations and nation-building skills that are of little use in a high-intensity conflict with a near-peer competitor. At the same time, the post-Cold War consolidation of the defense industrial base and the focus on cost savings, as opposed to the ability to produce munitions *en masse*, has left an industrial base far smaller than the one that won the Cold War. The result is that U.S. stockpiles of long-range strike munitions, artillery rounds, and air defenses are quite low—and will remain so for the

foreseeable future, while the United States reinvests in and revitalizes its defense industrial base.<sup>26</sup>

At the same time, the nuclear modernization plan begun in 2010 has yet to bear significant fruit. The plan—designed for a one-for-one replacement of the existing 2010 arsenal of 1550 strategic nuclear weapons—is not doing well. Sentinel, the intercontinental ballistic missile (ICBM) replacement, is seeing significant cost and schedule overruns.<sup>27</sup> Most worryingly, the Government Accountability Office (GAO) issued a report in August stating that the ability of the nuclear weapons enterprise to produce the plutonium pits necessary to support new nuclear warheads is already four years behind—and will likely fall further behind in the coming years, while incurring cost overruns in the billions of dollars.<sup>28</sup>

All of this is sobering enough—and this nuclear modernization plan was designed for a world in which Russia was not rapidly expanding its already large advantage in non-strategic nuclear weapons over the United States, was not threatening NATO members near daily with nuclear strikes, and was not initiating full-scale invasions of its neighbors.<sup>29</sup> It was a world in which China had not yet embarked upon the largest and fastest nuclear-arms buildup in the world and did not yet openly seek to overturn the U.S.-led international order. If by the 2030s the United States wants to deter two autocratic, near-peer competitors with combined nuclear arsenals more than double the size of the United States' deployed arsenal, it may very well need a larger nuclear arsenal than the one the United States envisioned in 2010.

And yet, the United States is failing at even that modest nuclear modernization plan, much less in building the arsenal it needs to deter China and Russia in the 2030s.

## The New Nuclear Mainstream Emerges

Against this backdrop of nuclear expansion by Russia and China, the destruction of the nuclear arms control regime by Russia, emboldened autocrats, reduced conventional munitions stockpiles due to ongoing conflicts, a United States that is falling behind in the production of conventional munitions and weapons platforms, and the cost and schedule overruns of a modest nuclear modernization effort, a new bipartisan, nuclear mainstream emerged in 2023.

In April 2023, a bipartisan study group based at the Lawrence Livermore National Laboratory (LLNL) and led by former Deputy Assistant Secretary of Defense Brad Roberts wrote *China's Emergence as a Second Nuclear Peer: Implications of U.S. Nuclear Deterrence Strategy*.<sup>30</sup> The LLNL study group

included former officials from the Obama, Trump, and George W. Bush Administrations, a retired four-star general, academics, and congressional staffers. Members of the group had worked on multiple nuclear and defense strategy documents for the past two decades or more and many of them had vocally supported the nuclear-arms-control treaties of the past three decades.

The report advocates that the United States take a number of steps to strengthen its deterrence posture, to include preparing for a world without nuclear-arms control, developing “the agile nuclear infrastructure...[and bringing] a sense of importance and urgency to the nuclear weapons enterprise and [enabling] more innovative approaches by relaxing the constraints of a highly risk-averse oversight culture,” fielding the SLCM-N, preparing to load additional nuclear warheads onto the U.S. ICBM force, and exploring the efficacy and utility of making a portion of the American ICBM force road-mobile. For a bipartisan group that included arms controllers who directly worked in the Obama Administration that sought a world without nuclear weapons, this was a stunning pronouncement.<sup>31</sup>

Then, in October 2023, the congressionally mandated Strategic Posture Commission issued its final report on the state of the U.S. strategic posture.<sup>32</sup> The commissioners included former Bush, Obama, Trump, and Biden Administration officials, a former Vice Chairman of the Joint Chiefs of Staff, and members of respected Washington think tanks. One of the commissioners, Rose Gottemoeller, served as the chief U.S. negotiator for President Obama’s New START nuclear-arms-control treaty with Russia and as the Under Secretary of State for Arms Control. In other words, Ambassador Gottemoeller’s arms-control *bona fides* are impeccable.

For this reason, many were surprised when the Strategic Posture Commission’s final report advocated not only an increase in conventional capabilities and munitions stockpiles, but that the United States prepare for a world without limits on numbers of nuclear weapons; prepare to rapidly increase the number of deployed strategic nuclear weapons by exercising the upload of nuclear warheads on existing ICBMs, and prepare to re-open shuttered ballistic missile tubes on the U.S. submarine force; increase the planned number of nuclear-armed cruise missiles and nuclear-capable B-21 bombers; “address the need for U.S. theater nuclear forces deployed or based in the Asia-Pacific”<sup>33</sup> (which was seen by many in the nuclear policy community as code for fielding SLCM-N); develop additional low-yield nuclear options; and reinvest in the nuclear enterprise.<sup>34</sup> For many in the nuclear policy community, including the nuclear realists, the arms controllers, and the disarmament sub-communities, the fact that such a bipartisan group reached consensus on the above recommendations was breathtaking.



By the end of 2023, other indicators of a new bipartisan consensus emerged. With overwhelming bipartisan support, Congress passed the fiscal year 2024 National Defense Authorization Act, which included establishing SLMC-N as a major Defense acquisition program (despite vocal opposition from the Biden Administration), providing additional funds to the nuclear enterprise to support nuclear modernization, and strengthening national missile defenses, particularly against Russian and Chinese threats.<sup>35</sup> Around the same time, the Center for Strategic and International Studies issued a bipartisan report that echoed many recommendations of the Strategic Posture Commission and the LLNL study group, to include reinvesting in the nuclear enterprise infrastructure, developing road-mobile ICBMs, and reinvesting in missile defenses.<sup>36</sup>

It was clear by November of 2023 that there was a new nuclear mainstream. Which issues does the new mainstream support? There is no consensus on all this, but there is broad support for more conventional capabilities, to include munitions, bombers, and refueling tankers; a reinvestment in the nuclear enterprise and a desire to see a more agile and responsive nuclear infrastructure; a slightly larger, and more diversified strategic arsenal, particularly for road-mobile ICBMs and an ICBM force capable of rapidly adding additional warheads; a willingness to explore an expanded role for national missile defenses; and a willingness to expand U.S. theater, non-strategic nuclear capabilities.

The new mainstream is not giving up on treaty-based nuclear-arms control, but instead recognizes that now is not the time for treaty-based arms reductions with Russia and China. There seems to be some indication that new forms of arms control may be pursued, particularly regarding orbital bombardment systems or caps on total numbers of nuclear weapons—but only after the strategic environment stabilizes. In fact, there is a recognition that building new nuclear capabilities may be an important predicate to being able to negotiate favorable future arms-control treaties.

Indeed, this last point encapsulates the overarching goal of the new, nuclear policy mainstream: to stabilize the strategic environment and deter a nuclear war, which the United States may not be postured to win by the mid-2030s given Russian and Chinese nuclear expansion and the problems within the U.S. nuclear enterprise.

## Those Outside the Mainstream

If those who hold the above views are within the new bipartisan mainstream, who is outside it?

Those who continue to advocate U.S. nuclear reductions and disarmament will find themselves increasingly irrelevant to the nuclear policy debates within the national security community. In particular, those who advocate a change in the U.S. targeting schema from a counter-force strategy to a de facto strategy of counter-value targeting (or, targeting large population centers, such as cities) are not only well outside the new bipartisan mainstream but may in fact be increasingly viewed as extremists.

For those outside the mainstream, their goal is not necessarily a world where there are no nuclear wars—although they would certainly welcome such a world; instead, their goal is a world without nuclear weapons. Nuclear abolition is the focus of their analysis—not strategic stability. And in a world where the authoritarians are expanding their nuclear arsenals, engaging in nuclear coercion, and invading their neighbors, calls for nuclear abolition among the Western democracies will become not only irrelevant to national security policymakers, but alienating to them.

## Conclusion

There are now two divergent groups in American nuclear policy and strategy. The mainstream is a bipartisan group of thought leaders, practitioners, strategists, and policymakers who recognize that a deterrence gap must be addressed not only through increased conventional capabilities, but through a reinvigorated nuclear enterprise that is agile and responsive and able to meet emerging deterrence-capability requirements in a timely fashion. The new mainstream also recognizes that nuclear-arms-control treaties that reduce arsenal sizes may not return for many years. The other group says that U.S. nuclear reductions are the answer, no matter the question—little thought is spared for trivialities like U.S. extended deterrence to allies, damage limitation should deterrence fail, and hedging against an uncertain strategic future.

The United States is still in the initial stages of its nuclear modernization programs—the decisions that Congress makes now will have effects into the 2080s, when the longest-serving programs are expected to age out of the force.<sup>37</sup> This fact alone should caution against making revolutionary changes in the U.S. nuclear posture based on the hope of international nuclear disarmament in the distant world of 2010. But today, given the rapid rise of Chinese and Russian nuclear capabilities, and their all too obvious friendship bonded by a shared anti-Americanism, such calls for disarmament have transcended naivete and entered the realm of unreality.



The U.S. Congress and executives in government agencies should recognize that those in the nuclear disarmament community have no counterparts in Beijing or Moscow—their arguments, to the extent they escape their self-contained echo chamber, are aimed solely at weakening the United States. Congress, the media, allies, and adversaries should all recognize the emerging consensus in Washington, DC, is not to shrink before growing Chinese and Russian threats, but to meet those threats through an increasingly capable nuclear arsenal backed by the industrial capacity to respond to dynamic challenges.

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## Endnotes

1. U.S. Department of State, "Treaty Between the United States of America and the Russian Federation on Further Reduction and Limitation of Strategic Offensive Arms," January 3, 1993, <https://2009-2017.state.gov/t/avc/trty/102887.htm> (accessed December 21, 2023); U.S. Department of State Office of Cooperative Threat Reduction, "Our Mission," <https://www.state.gov/bureaus-offices/under-secretary-for-arms-control-and-international-security-affairs/bureau-of-international-security-and-nonproliferation/office-of-cooperative-threat-reduction/> (accessed March 8, 2024); and Daryl Kimball, "The Strategic Offensive Reductions (SORT) at a Glance," Arms Control Association, July 2022, <https://www.armscontrol.org/factsheets/sort-glance> (accessed December 21, 2023).
2. Jonathan Medalia, "The Reliable Replacement Warhead Program: Background and Current Developments," Congressional Research Service, July 27, 2009, <https://sgp.fas.org/crs/nuke/RL32929.pdf> (accessed December 21, 2023), and David Hambling, "Bunker-Busters Set to Go Nuclear," *NewScientist*, November 7, 2002, <https://www.newscientist.com/article/dn3016-bunker-busters-set-to-go-nuclear/> (accessed December 21, 2023).
3. The White House, "Remarks by President Barack Obama in Prague as Delivered," April 5, 2009, <https://obamawhitehouse.archives.gov/the-press-office/remarks-president-barack-obama-prague-delivered> (accessed December 21, 2023).
4. See William J. Broad and David E. Sanger, "U.S. Ramping Up Major Renewal in Nuclear Arms," *The New York Times*, September 21, 2014, <https://www.nytimes.com/2014/09/22/us/us-ramping-up-major-renewal-in-nuclear-arms.html> (accessed August 21, 2023); U.S. Department of State, "Treaty Between the United States of America and the Russian Federation on Measures for the Further Reduction and Limitation of Strategic Offensive Arms," April 8, 2010, <https://2009-2017.state.gov/documents/organization/140035.pdf> (accessed August 21, 2023); and Marcy Rutan Fowler, "Next Steps after New START: Issues for Future Arms Control Negotiations," Carnegie Endowment for International Peace, December 24, 2010, <https://carnegieendowment.org/2010/12/24/next-steps-after-new-start-issues-for-future-arms-control-negotiations-pub-42192> (accessed August 21, 2023).
5. Office of the Secretary of Defense, *Nuclear Posture Review Report*, April 2010, [https://dod.defense.gov/Portals/1/features/defenseReviews/NPR/2010\\_Nuclear\\_Posture\\_Review\\_Report.pdf](https://dod.defense.gov/Portals/1/features/defenseReviews/NPR/2010_Nuclear_Posture_Review_Report.pdf) (accessed March 8, 2024).
6. See Choe Sang-Hun, Victoria Kim, and John Yoon, "North Korea's Arsenal Has Grown Rapidly. Here's What's in It," *The New York Times*, November 18, 2022, <https://www.nytimes.com/article/north-korea-arsenal-nukes.html> (accessed December 21, 2023).
7. Kelsey Davenport and Julia Masterson, "The Joint Comprehensive Plan of Action at a Glance," Arms Control Association, March 2022, <https://www.armscontrol.org/factsheets/JCPOA-at-a-glance> (accessed December 21, 2023).
8. Office of the Secretary of Defense, *Nuclear Posture Review*, February 2018 <https://media.defense.gov/2018/Feb/02/2001872886/-1/-1/1/2018-NUCLEAR-POSTURE-REVIEW-FINAL-REPORT.PDF> (accessed March 8, 2024).
9. U.S. Department of State, "Russia's Violation of the Intermediate-Range Nuclear Forces (INF) Treaty," December 4, 2018, <https://2017-2021.state.gov/russias-violation-of-the-intermediate-range-nuclear-forces-inf-treaty/> (accessed August 22, 2023).
10. C. Todd Lopez, "U.S. Withdraws from Intermediate Range Nuclear Forces Treaty," U.S. Department of Defense, August 2, 2019, <https://www.defense.gov/News/News-Stories/Article/Article/1924779/us-withdraws-from-intermediate-range-nuclear-forces-treaty/> (accessed December 21, 2023).
11. Steven Pifer, "Reviving Nuclear Arms Control Under Biden," Brookings Institution, December 1, 2020, <https://www.brookings.edu/articles/reviving-nuclear-arms-control-under-biden/> (accessed December 21, 2023).
12. Public Law No. 117–263, National Defense Authorization Act for 2023, 117th Congress, December 23, 2022, <https://www.congress.gov/117/plaws/publ263/PLAW-117publ263.pdf> (accessed December 21, 2023).
13. Joe Gould, "Biden Plan to Shelve Trump-Era Sea Nuke Comes Under Fire," *DefenseNews*, April 1, 2022, <https://www.defensenews.com/congress/2022/04/01/biden-plan-to-shelve-trump-era-sea-nuke-comes-under-fire/> (accessed December 21, 2023).
14. Paul Sonne and John Hudson, "U.S. Has Sent Private Warnings to Russia Against Using a Nuclear Weapon," *The Washington Post*, September 22, 2022, <https://www.washingtonpost.com/national-security/2022/09/22/russia-nuclear-threat-us-options/> (accessed December 21, 2023).
15. Heather Williams, "Russia Suspends New START and Increases Nuclear Risks," Center for Strategic and International Studies, February 23, 2023, <https://www.csis.org/analysis/russia-suspends-new-start-and-increases-nuclear-risks> (accessed December 21, 2023).
16. Geoff Brumfiel, "Russia Is Scrapping Its Ratification of a Key Nuclear Test Ban. Here's What That Means," National Public Radio, October 17, 2023, <https://www.npr.org/2023/10/17/1206114320/russia-is-scrapping-its-ratification-of-a-key-nuclear-test-ban-heres-what-that-m> (accessed December 21, 2023).
17. Patty Jane Geller, "The U.S. Must Strengthen Its Nuclear Forces to Deter Growing Nuclear Threats," Heritage Foundation *Backgrounder* No. 3736, November 30, 2022, <https://www.heritage.org/defense/report/the-us-must-strengthen-its-nuclear-forces-deter-growing-nuclear-threats>.
18. Hanna Notte, "The West Cannot Cure Russia's Nuclear Fever," War on the Rocks, July 18, 2023, <https://warontherocks.com/2023/07/the-west-cannot-cure-russias-nuclear-fever/> (accessed December 21, 2023).
19. *Ibid.*
20. "China-Taiwan Tensions: Xi Jinping Says 'Reunification' Must be Fulfilled," BBC, October 9, 2021, <https://www.bbc.com/news/world-asia-china-58854081> (accessed December 21, 2023).

21. Transcript, “Admiral Charles A. Richard, Commander U.S. Strategic Command, Holds a Press Briefing,” U.S. Department of Defense, April 22, 2021, <https://www.defense.gov/News/Transcripts/Transcript/Article/2582171/admiral-charles-a-richard-commander-us-strategic-command-holds-a-press-briefing/> (accessed December 21, 2023).
22. Brad Lendon, “China Is Building a Sprawling Network of Missile Silos, Satellite Imagery Appears to Show,” CNN, July 2, 2021, <https://www.cnn.com/2021/07/02/asia/china-missile-silos-intl-hnk-ml/index.html> (accessed December 21, 2023).
23. U.S. Department of Defense, “Military and Security Developments Involving the People’s Republic of China, 2023,” *Annual Report to Congress*, October 19, 2023, <https://media.defense.gov/2023/Oct/19/2003323409/-1/-1/1/2023-MILITARY-AND-SECURITY-DEVELOPMENTS-INVOLVING-THE-PEOPLES-REPUBLIC-OF-CHINA.PDF> (accessed March 8, 2024).
24. U.S. Department of Defense, “Strategy for Countering Weapons of Mass Destruction,” 2023, [https://media.defense.gov/2023/Sep/28/2003310413/-1/-1/1/2023\\_STRATEGY\\_FOR\\_COUNTERING\\_WEAPONS\\_OF\\_MASS\\_DESTRUCTION.PDF](https://media.defense.gov/2023/Sep/28/2003310413/-1/-1/1/2023_STRATEGY_FOR_COUNTERING_WEAPONS_OF_MASS_DESTRUCTION.PDF) (accessed March 8, 2024).
25. Maiya Clark, “U.S. Military Has Fewer Munitions Than You Might Think—and That’s a Problem,” Heritage Foundation *Commentary*, February 3, 2023, <https://www.heritage.org/defense/commentary/us-military-has-fewer-munitions-you-might-think-and-thats-problem>.
26. Maiya Clark, “Rapidly Depleting Munitions Stockpiles Point to Necessary Changes in Policy,” Heritage Foundation *Issue Brief* No. 5300, December 20, 2022, <https://www.heritage.org/defense/report/rapidly-depleting-munitions-stockpiles-point-necessary-changes-policy>.
27. Congressional Research Service, “U.S. Strategic Nuclear Forces: Background, Developments, and Issues,” *Report for Congress*, updated December 14, 2021, <https://crsreports.congress.gov/product/pdf/RL/RL33640> (accessed March 8, 2024).
28. U.S. Government Accountability Office, “National Nuclear Security Administration: Assessments of Major Project,” GAO–23–104402, August 17, 2023, <https://www.gao.gov/assets/gao-23-104402.pdf> (accessed March 8, 2024), and Stephen Losey, “US Air Force’s Sentinel Missile ‘Struggling,’ Faces Rising Costs,” *Defense News*, November 13, 2023, <https://www.defensenews.com/air/2023/11/13/us-air-forces-sentinel-missile-struggling-faces-rising-costs/> (accessed December 21, 2023).
29. Robert Peters, “America’s Current Nuclear Arsenal Was Built for a More Benign World,” Heritage Foundation *Issue Brief* No. 5330, September 7, 2023, <https://www.heritage.org/defense/report/americas-current-nuclear-arsenal-was-built-more-benign-world>.
30. Brad Roberts et al., *China’s Emergence as a Second Nuclear Peer: Implications for U.S. Nuclear Deterrence Strategy*, A Report of a Study Group Convened by the Center for Global Security Research at Lawrence Livermore National Laboratory, Spring 2023, [https://cgsr.llnl.gov/content/assets/docs/CGSR\\_Two\\_Peer\\_230314.pdf](https://cgsr.llnl.gov/content/assets/docs/CGSR_Two_Peer_230314.pdf) (accessed March 9, 2024).
31. See Elaine Bunn’s 2023 testimony before the Senate Armed Services Committee Subcommittee on Strategic Forces, in which she notes that she supported the retirement of the nuclear sea-launched cruise missile under President Obama, and initially opposed the SLCM-N capability, before finally supporting the funding of the SLCM-N program: Transcript, “Hearing to Receive Testimony on Regional Nuclear Deterrence,” Senate Armed Services Committee, March 28, 2023, [https://www.armed-services.senate.gov/imo/media/doc/23-21\\_03-28-2023.pdf](https://www.armed-services.senate.gov/imo/media/doc/23-21_03-28-2023.pdf) (accessed December 21, 2023).
32. The Strategic Posture Commission, *America’s Strategic Posture: The Final Report of the Congressional Commission on the Strategic Posture of the United States*, October 12, 2023, <https://www.ida.org/-/media/feature/publications/A/Am/Americas%20Strategic%20Posture/Strategic-Posture-Commission-Report.pdf> (accessed December 12, 2023).
33. *Ibid.*
34. Justin Katz, “Strategic Force Commission Stops Short of Endorsing Controversial SLCM-N Program,” *Breaking Defense*, October 19, 2023, <https://breakingdefense.com/2023/10/strategic-forces-commission-stops-short-of-endorsing-controversial-slcm-n-program/> (accessed December 21, 2023).
35. “National Defense Authorization Act for Fiscal Year 2024, Conference Report to Accompany H.R. 2670,” 118th Congress, 1st Sess., <https://docs.house.gov/billsthisweek/20231211/FY24%20NDAA%20Conference%20Report%20-%20%20FINAL.pdf> (accessed December 21, 2023).
36. Heather Williams et al., “Project Atom 2023: A Competitive Strategies Approach for U.S. Nuclear Posture Through 2035,” Center for Strategic and International Studies, September 29, 2023, <https://www.csis.org/analysis/project-atom-2023> (accessed December 21, 2023).
37. Yasmin Tadjdeh, “No Wiggle Room in Schedule for Columbia-Class Submarine,” *National Defense*, July 21, 2017, <https://www.nationaldefensemagazine.org/articles/2017/7/21/no-wiggle-room-in-schedule-for-columbia-class-submarine> (accessed March 9, 2024).