

The World Is Becoming Ever More Dangerous: The President Must Revitalize the U.S. Strategic Arsenal

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KEY TAKEAWAYS

Despite ever-increasing global threats, America is failing to sustain its nuclear arsenal or prepare for the future. These failures will have grave consequences.

The President must make rebuilding the nation's strategic nuclear deterrent a top priority, with immediate action in strategy, personnel, policy, and capabilities.

Only the President can infuse the nuclear enterprise with the sense of urgency needed to field a credible deterrent in the 2030s.

The United States' ability to deter its adversaries from attacking America and its closest allies and partners is at its lowest level since the end of the Cold War. China's and Russia's nuclear arsenals are growing unchecked, along with their ambitions, while America's pedestrian response leaves it open to their coercion.

Despite the unambiguous and growing set of threats, the United States is failing to sustain its nuclear arsenal or prepare for the future. These failures will have grave consequences for the U.S.

Any President must make rebuilding the nation's strategic nuclear deterrent a top priority, to include immediate action in the strategy, personnel, policy, and capabilities arenas.

The stakes could not be higher: The United States must take the steps necessary to build and field a

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nuclear arsenal capable of simultaneously not only deterring both Moscow and Beijing but also to complicate the ambitions of Pyongyang and Tehran.

The Threat

Over the past three years, the security environment has degraded significantly. From Russia to China to North Korea to the Middle East, America's enemies seek to take advantage of perceived weakness, all the while building nuclear arsenals and capabilities meant to deter the United States from stopping them.¹

After Russia invaded Ukraine for a second time in February 2022, Vladimir Putin almost immediately began threatening to use nuclear weapons against Ukraine and even conducted an out-of-cycle nuclear weapons exercise in an attempt to manipulate the response of the United States and the North Atlantic Treaty Organization (NATO). In addition, Russia essentially abrogated the New Strategic Arms Reduction Treaty (New START), which included on-site inspections and capped the number of strategic nuclear weapons in the United States and Russia. Moscow also “de-ratified” the Comprehensive Test Ban Treaty, an international agreement that prohibits participating states from engaging in super-critical nuclear weapons testing.²

These actions, coupled with Russia's movement of theater nuclear weapons into Belarus, are reminders that while Russia and the United States have the same treaty-accountable number of strategic nuclear weapons, Russia has an estimated 2,000 non-strategic nuclear weapons against the few hundred or so non-strategic nuclear weapons in the American arsenal.³ To make matters worse, even the Biden Administration expects Russia's nuclear arsenal to grow along with Russia's reliance on its nuclear arsenal to make up for the Russian military's depleted conventional forces⁴—a concern that is even more valid following the February 2024 report of a potential Russian nuclear device in orbit.⁵

Meanwhile, as part of a two decades-long military buildup, China began a “breathtaking” expansion of its nuclear arsenal. In the summer of 2021, for example, satellite imagery revealed that China was building more than 300 missile silos in its western desert. In the fall of 2023, the Defense Department's unclassified *China Military Power Report* noted that in the previous 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 also new nuclear-capable long-range bombers and ballistic missile submarines.⁶ The report even noted Chinese pursuit of putting nuclear weapons in orbit on an fractional-orbital bombardment system.

Assuming that China does not further exceed Pentagon estimates, Beijing could reach strategic nuclear parity with the United States by the early 2030s.⁷ Even if China did not seek nuclear overmatch, and was satisfied with nuclear parity, simultaneously deterring two nuclear peers with the current U.S. nuclear arsenal will prove challenging.

Further, North Korea continues its slow but steady expansion of its nuclear arsenal. In December 2023, North Korea reportedly successfully tested an intercontinental ballistic missile (ICBM), the Hwasong-18.⁸ This means that North Korea may soon be able to deliver a nuclear weapon to the American homeland, which North Korean dictator Kim Jung-un vowed to “thoroughly annihilate” if provoked.⁹

Following the expulsion of International Atomic Energy Agency (IAEA) nuclear inspectors in the summer of 2023, the Iranian-backed Hamas attack on Israel on October 7, 2023, and its Houthi-proxies’ subsequent attacks on international shipping, Iran continues to export terror and mayhem across the Middle East while pursuing nuclear ambitions. On December 26, 2023, the IAEA reported that Iran is enriching uranium to 60 percent, far above the 3 percent of enrichment needed for its civilian nuclear power reactors, and just a technical step away from the 90 percent enrichment needed for weapons-grade uranium. There is no civilian reason for Tehran to produce and stockpile 60 percent enriched uranium.¹⁰ This advancement combined with what was discovered in Iran’s nuclear weapons archive in 2018 leads to the only logical conclusion: Iran is seeking a “breakout” nuclear weapons capability.¹¹

The result of all this is that the United States may, by the 2030s, face and simultaneously have to deter actors—from Moscow to Beijing to Pyongyang to Tehran—who are vehemently opposed to American interests and who field a combined deployed nuclear arsenal that dwarfs that of the United States.

Struggles with Nuclear Modernization

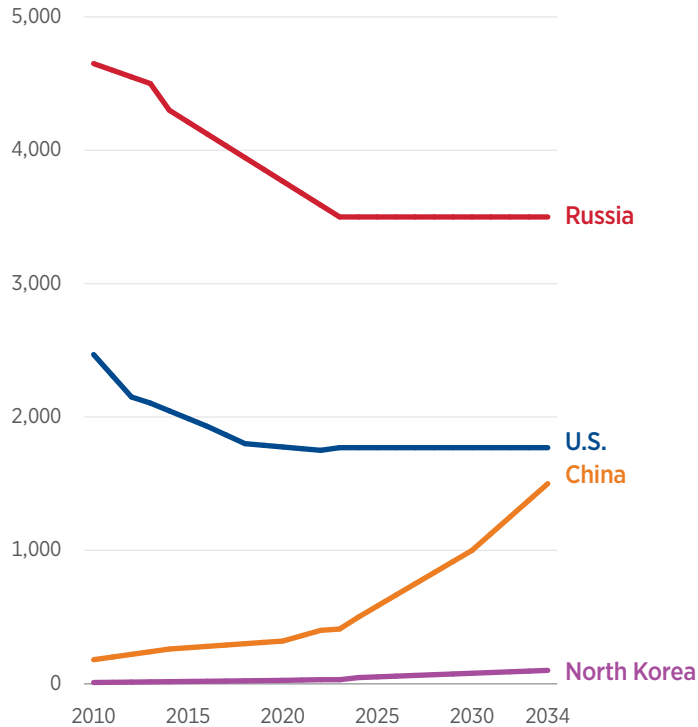
In 2009, President Barack Obama urged the world to achieve a future free of nuclear weapons, and in 2010 the United States began planning its future deterrence requirements with high hopes of a more benign threat environment.¹² In line with these assumptions, the United States essentially began the current nuclear modernization program to replace the remaining Cold War–legacy triad with new warheads, missiles, bombers, and submarines in a one-for-one manner.

So, how are things going for the U.S. nuclear modernization effort? Not great.

CHART 1

U.S. Nuclear Arsenal in Need of Revitalization

NUMBER OF OPERATIONALLY DEPLOYED NUCLEAR WEAPONS:
CURRENT AND PROJECTED



NOTES: Some figures have been interpolated. North Korea's arsenal in 2010 was estimated to be less than 10, and its 2022 arsenal was estimated to be between 20 and 30.

SOURCES: Bulletin of the Atomic Scientists, "Chinese Nuclear Weapons, 2024," <https://www.tandfonline.com/doi/epdf/10.1080/00963402.2023.2295206?needAccess=true> (accessed February 26, 2024); U.S. Department of Defense, "Military and Security Developments Involving the People's Republic of China, 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 February 26, 2024); Bulletin of the Atomic Scientists, "Russian Nuclear Weapons, 2023," <https://www.tandfonline.com/doi/full/10.1080/00963402.2023.2202542> (accessed February 26, 2024); Asan Institute for Policy Studies, "Countering the Risks of North Korean Nuclear Weapons," <https://en.asaninst.org/contents/countering-the-risks-of-north-korean-nuclear-weapons/> (accessed February 26, 2024); Bulletin of the Atomic Scientists, "Nuclear Notebook: United States Nuclear Weapons, 2023," <https://thebulletin.org/premium/2023-01/nuclear-notebook-united-states-nuclear-weapons-2023/> (accessed February 26, 2024).

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The United States has not produced a new plutonium pit (a vital component necessary to create nuclear detonations) since Rocky Flats ceased production in 1989, and current efforts to restart the capability are years behind schedule. Los Alamos National Lab will likely create its first war reserve pit this fall, while the Savannah River Site's ability to produce war reserve plutonium pits in any meaningful quantity is approximately

a decade away.¹³ Other key projects, such as the much-needed Uranium Processing Facility and Lithium Processing Facility, are overbudget and much delayed.

After not having built nuclear weapons or produced nuclear fissile material in almost three and a half decades, the U.S. will have to re-learn how to enrich uranium for defense purposes—while the Biden Administration is attempting to shelve critical projects, such as the Tritium Finishing Facility in South Carolina and the High Explosive Synthesis, Formulation, and Production (HESFP) Facility in Texas, due to cost and competing priorities across the nuclear weapons complex.¹⁴ All of this severely limits America’s ability to produce the new nuclear warheads necessary to deter its adversaries.

The Sentinel missile, which should begin replacing the Minuteman III (MMIII) ICBMs by the end of the 2020s, is also struggling. Indeed, the Sentinel program is in breach of the Nunn–McCurdy Act, a law that requires the Department of Defense (DOD) to certify a program as necessary once it passes a certain threshold of cost and schedule overrun, forcing the DOD to choose between terminating the program and declaring the program essential to national security and, thereby, maintaining the program.¹⁵ It is becoming increasingly clear that the current timelines for Sentinel to replace MM III will not hold and that the Air Force will have to develop mitigation strategies to maintain Strategic Command’s deterrence requirements.

The *Columbia*-class ballistic missile submarine is supposed to replace the *Ohio*-class submarine. Again, according to the Government Accountability Office, the *Columbia* program “also remains behind on producing design products—in particular, work instructions that detail how to build the submarine.”¹⁶ And with the *Ohio*-class submarines retiring within the next decade, and a two-year slippage in when the *Columbias* were meant to be operational, there is little wiggle room to build them before creating dangerous gaps in the Navy’s ability to have ballistic missile submarines on patrol—the core of America’s nuclear deterrent. These boats and the missiles on them form the heart of America’s secure second-strike capability. So long as enemies know that the U.S. can respond with devastating effect to any nuclear attack on the U.S. homeland, they have good reason not to test U.S. resolve. If they no longer believe the U.S. has that capability, then they are more likely to consider or even attempt a splendid first strike against the United States.

Not all is doom and gloom. The B-21 Raider bomber and the long-range stand-off (LRSO) weapon, projected to replace the B-2 bomber and AGM-86

air-launched cruise missile, respectively, are on track to be operational later this decade. And, despite its omission from the Biden Administration's initial defense budget request, Congress wisely chose to insert funding for the nuclear-capable sea-launched cruise missile (SLCM-N) into the defense budget and mandate the creation of a program of record for both the warhead and delivery system.¹⁷

If the United States is unable to field a credible nuclear deterrent by the 2030s—when China likely will reach parity with the United States and when the current U.S. ICBM and submarine force will age out, it is possible that America's enemies will become even more emboldened than they are now and believe that during an acute crisis they can escalate to the nuclear threshold while facing a hobbled and undersized American nuclear deterrent.

As an example, should China face a U.S.-led coalition of Japan, Australia, and others defending Taiwan, it may believe that it could employ nuclear weapons against a coalition member's military target to achieve operational effect and also to demonstrate capability and will to compel the U.S.-led coalition to abandon its defense of Taiwan. If the United States fields a credible theater nuclear capability that can hold at risk the growing number of militarily relevant targets, China is far more likely not to consider an escalation to the theater nuclear threshold. Conversely, if the United States fails to field a credible theater nuclear force tailored to the Western Pacific, China may be incentivized to employ nuclear weapons, particularly if it believes it can gain advantage without paying a significant cost.

Another example is the role that nuclear weapons have played in the Ukraine war. One could argue that Russian nuclear weapons have deterred direct American or NATO involvement in the defense of Ukraine—but the American nuclear deterrent has similarly enabled it to resupply Ukraine while almost certainly dissuading Russia from interjecting nuclear weapons on the battlefield itself. Put another way, nuclear weapons are the ultimate backstop for all U.S. military operations, particularly those involving nuclear adversaries.

Immediate Actions for the U.S. President

To ensure that the American nuclear enterprise is on schedule and will remain viable for the next half century, one person is essential: the President of the United States. Only the President can infuse the nuclear enterprise, which spans the DOD and the Department of Energy, with the sense of urgency needed to field a credible deterrent in the 2030s.

President Joe Biden campaigned in 2020 on a platform to reduce the saliency of nuclear weapons in America's national security. As a sentiment in 2010 this might be understandable, but in 2020, let alone 2024, it is terrible policy given the current global threat trajectory. The United States has led the way in nuclear reductions since the end of the Cold War, but Russia and China have refused to follow its example.¹⁸ The President must reiterate the fundamental fact that U.S. nuclear weapons remain the cornerstone of an effective and credible strategic deterrent that protects the United States and its allies from strategic attack and inhibits great-power conflict.

In addition, the U.S. President must order the DOD to build on the work of the non-partisan Strategic Posture Commission and undertake an immediate re-evaluation of the U.S. nuclear posture, given what is now known of China's nuclear expansion, Russian nuclear threats, the reported operational deployment of North Korea's road-mobile ICBM, and Iran's imminent breakout nuclear capability. This re-evaluation should include an immediate Nuclear Posture Review (NPR). While most NPRs take more than a year to be completed and involve scores of individuals from across the U.S. government, this NPR should be completed within three months of being tasked and written by a hand-picked group of six to eight individuals drawn from the Office of the Secretary of Defense, the Joint Staff, and the Department of Energy. This NPR should focus on modernizing the U.S. nuclear deterrent, including potential changes to nuclear strategy, force posture, force composition, size, and diversity of capabilities. A more extensive examination could be conducted over the following year. Further, and given that the first term of the next Administration cannot be wasted, there are a number of self-evident actions that the next President could take immediately to reinvigorate the U.S. deterrent.

The President should:

Make Deterrent Modernization a Top National Priority. The President must make the case to the American people that nuclear weapons are the ultimate guarantor of their freedom and prosperity. The President must make it known that while the nuclear arsenal remains effective today, it is aging, and the country must reinvest in the arsenal in the face of an expanding Russian arsenal and the breathtaking nuclear expansion underway today in China. Within a month of the next inauguration, the President should make a major address on this topic to the American people and make it clear that he or she will direct a national campaign to ensure that the U.S. has a full complement of modern submarines, bombers, missiles, and nuclear warheads necessary to deter adversaries and protect the American people.

Direct the National Nuclear Security Administration (NNSA)

Administrator to Provide Monthly Briefings in the Oval Office and Require the NNSA to Submit its Budget Requests Separately from the Rest of the Department of Energy. Too often, the Secretary of Energy presents the priorities of the NNSA in the context of other departmental priorities. If modernizing the nuclear deterrent is truly a national priority, the President needs to hear from the Administrator directly and without a filter. Instituting these processes will help to ensure that NNSA priorities stand out.

Direct the Office of Management and Budget (OMB) Director to Submit to Congress a Supplemental Budget Request to Accelerate Key NNSA Projects, as well as DOD Delivery Platforms. Hiring nuclear engineers, physicists, and other professionals, expediting construction projects, and using the Defense Production Act all require additional appropriations from Congress. Given the dire urgency of producing warheads and plutonium pits and increasing the number of delivery platforms, the President should direct the OMB Director to submit a supplemental budget request within the next 60 days. This will help to jump-start congressional processes to appropriate funds necessary to expedite key projects and processes.

Direct the Placement of More Than One Warhead on Delivery Vehicles of the Ballistic Missile Force. The current MMIII ICBM can no longer be significantly life-extended, and the Sentinel program is experiencing significant cost overruns and delays.¹⁹ The President should direct that the Sentinel ICBM be deployed with multiple independent re-entry vehicle (MIRV) warheads as a hedge against adversaries' expanding nuclear arsenals, and that, beginning in 2026, the Air Force begin re-installing MIRVs on MMIIIs to assist as a mitigation strategy until the new capability comes online. Further, the DOD should examine how fast it can re-open shuttered missile tubes in the ballistic missile submarine force.

Direct the Production of New Nuclear Systems. The President should direct the continued production, development, and deployment of the SLCM-N; initiate formal analyses of alternatives (AoAs) for hypersonic nuclear delivery systems; and explore ground-launched options to include existing Army long-range precision-strike capabilities being fielded to offset Russia's and China's massive nuclear buildups. The current Administration, against the advice of nearly every uniformed military advisor to testify publicly, attempted to cancel the SLCM-N.²⁰ This weapon system will be particularly useful in the Pacific scenario described earlier and will increase the lethality of the U.S. Navy—while meeting the stated requirements from the non-partisan Strategic Posture Commission. While there are various

options for the development and deployment of a SLCM-N, variants of either the Tomahawk Land Attack Missile (TLAM) or LRSO hold merit. For instance, the TLAM is already compatible with the Army's Mid-Range Capability (MRC) and the LRSO likely fits within the size parameters for a Virginia Payload Module and could take advantage of existing programs of record.

Direct the DOD to Examine How to Develop Nuclear Variants for Navy, Air Force, and Army Hypersonic Programs. America's adversaries are already currently fielding nuclear-capable hypersonic systems. These platforms allow them to hold key U.S. and ally targets at risk with fast traveling and maneuverable delivery systems that are difficult to intercept. Having a similar capability will help the United States to strengthen strategic stability and deter both Russia and China.

Direct the Air Force to Examine the Feasibility of Making the Sentinel ICBM Road Mobile. A road-mobile ICBM would create significant targeting challenges for U.S. adversaries. Further, a road-mobile variant, operated out of a garrison, could help to mitigate construction conversion delays currently plaguing the program. This capability should be in addition to the current requirement in Section 1641 of Public Law No. 118-31 to refurbish and make operational 450 Sentinel silos at F. E. Warren Air Force Base and Malmstrom Air Force Base.

Direct an Enhanced Global Deterrence Posture. The President should direct the Secretaries of State and Defense to initiate consultations and planning to enhance U.S. nuclear force presence across the Pacific, in key Asian countries, and in Europe. Prepositioned U.S. nuclear gravity bombs and aircraft in Europe have deterred Russia and have assured U.S. allies for decades. After years of efforts to disarm and deprioritize the role of nuclear weapons, allies, particularly those in Asia, are now questioning the U.S. deterrent. Poland has also begun publicly lobbying to host U.S. gravity bombs at bases within its borders. The President should direct a process to pre-position U.S. nuclear forces in Asia and at additional sites in Europe.

The National Nuclear Security Administration (NNSA) should:

Transition to a Wartime Footing. The President should ensure that the culture of the NNSA—the government agency responsible for producing nuclear warheads—changes to reflect the dire state of the nuclear arsenal and the urgency of nuclear modernization, particularly pit production.

The Secretary of Energy and the NNSA Administrator should:

Leverage All Available Executive Authorities to Expedite Pit Production and Other Key Processes. The President, and—by delegated authorities—the Secretary of Energy and NNSA Administrator, have

authority to waive regulations. The Secretary and the Administrator should include expedited timelines in facilities construction and other contracts, direct the use of expedited hiring authorities, use Defense Production Act funding to give loans and equipment to contractors, and even pay more for expedited performance of construction. President Biden, or the next President immediately after assuming office in January 2025, should issue an executive order exempting the NNSA from Department of Energy bureaucratic processes and policies below the Secretary level. This single act will help to jump-start the production complex, remove unnecessary distractions, and focus all resources on building U.S. nuclear weapons.

Conclusion

Deterring a strategic attack on the United States is the DOD's—and the President's—top priority. There is no greater mission, and the nuclear arsenal is America's most effective means of deterrence.

The price associated with the above recommendations is significant. It will probably cost tens of billions of dollars to put these recommendations into action. While some DOD and Department of Energy dollars could be reallocated to the strategic deterrent mission, that will not be enough. Congress needs to increase defense spending for the deterrent, while being mindful that this increase will have to be offset with reductions in non-essential spending. The costs of deterrence failure are incalculably greater. The longer the nation waits, the more acute the danger becomes.

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