



Two Swedish Air Force Saab JAS 39 Gripens escort U.S. Air Force 23<sup>rd</sup> Expeditionary Bomb Squadron B-52H Stratofortress over Sweden during Bomber Task Force mission, August 27, 2022 (U.S. Air Force/Michael A. Richmond)

# Preventing the Nuclear Jungle

## Extended Deterrence, Assurance, and Nonproliferation

By Jennifer Bradley

Today, most people do not remember a time when the United States was not allied with the North Atlantic Treaty Organization (NATO), Australia, Japan, and the Republic of Korea. As these alliances

span over seven decades, it is easy to take for granted that the relationships will continue as they always have into the future. In fact, this phenomenon is not as common as it may seem, as only a handful of alliances have had this kind of longevity in the modern era.<sup>1</sup> Based on shared values, common interests, and a shared threat perspective, these alliances have had the safe, effective, and reliable nuclear deterrent of the

United States throughout the decades to serve as the cornerstone of the security guarantees provided. The changing security landscape and the emergence of the two-peer nuclear environment will challenge extended deterrence in ways not yet well understood. This requires reexamining deterrence strategies and potentially acquiring new capabilities to effectively assure allies and close the growing “assurance gap.”

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## U.S. Policy of Extended Deterrence

The U.S. policy of extended deterrence was born out of the overwhelming conventional threat posed to Western Europe by the Soviet Union at the dawn of the Cold War. To deter Soviet invasion and expansion, the United States extended nuclear deterrence abroad. NATO was created as a nuclear alliance in 1949, with nuclear deterrence made credible by U.S. nuclear forces forward-deployed to NATO serving as the foundation of the collective defense agreement.<sup>2</sup> The policy of extended deterrence was not limited to Europe. In the Pacific, to defend against growing threats from China and North Korea, the U.S. nuclear umbrella expanded to include Australia, Japan, and South Korea, with U.S. nuclear weapons forward-deployed to South Korea, though without NATO-style nuclear-sharing arrangements and fully under U.S. control.

The policy of extended deterrence remains a key component of the security strategy of the United States and its allies. The 2022 Nuclear Posture Review released by the Joseph R. Biden administration affirms the U.S. commitment to extended deterrence, stating that the United States would “[ensure] our strategic deterrent remains safe, secure, and effective, and our extended deterrence commitments remain strong and credible.”<sup>3</sup> Furthermore, allies under the nuclear umbrella have reiterated the importance of relying on the U.S. extended nuclear deterrent for their security. The Secretary General’s 2022 annual report reaffirmed NATO’s status as a nuclear alliance, stating, “As long as nuclear weapons exist, NATO will remain a nuclear alliance.”<sup>4</sup>

In 2023, the Washington Declaration affirmed that South Korea “has full confidence in U.S. extended deterrence commitments and recognizes the importance, necessity, and benefit of its enduring reliance on the U.S. nuclear deterrent.”<sup>5</sup> Japan’s Defense White Paper provides a summary of a U.S.-Japan defense ministerial meeting in which Japan “stated that bilateral efforts at various levels to ensure

nuclear deterrence remains credible and resilient [are] more important than ever under the current international security situation.”<sup>6</sup> And finally, Australia’s National Defence Strategic Review states, “In our current strategic circumstances, the risk of nuclear escalation must be regarded as real. Our best protection against the risk of nuclear escalation is [U.S.] extended nuclear deterrence.”<sup>7</sup>

Both the United States and its allies remain committed to extended deterrence, but changes in the security environment mandate a review of the consultative mechanisms and the forces available, as they remain largely unchanged from when they were adjusted after the conclusion of the Cold War. During the Cold War, extended nuclear deterrence was made credible by forward-deploying nuclear weapons into Europe and the Pacific. However, as the security environment changed after the collapse of the Soviet Union, the United States shrank its nuclear footprint, returning most of its nuclear weapons from Europe, and retiring the Tomahawk nuclear sea-launched cruise missile (TLAM-N).<sup>8</sup> While these decisions made sense for the security environment that they were made in, that era has passed. Renewed focus on ensuring the credibility of extended deterrence is necessary to assure allies of their security in a changing security environment.

## Challenges to Extended Deterrence

Russia’s invasion of Ukraine brought into sharp relief the challenges that the United States and its allies face from revisionist powers dissatisfied with the international system. Threatening nuclear weapons use against both NATO and non-NATO states has become commonplace for Russian officials—a threat made credible by a robust nuclear modernization program focused on improving existing forces and developing novel capabilities.<sup>9</sup> More concerning, the poor performance of Russian conventional forces in Ukraine may lead Russian military strategists to rely more heavily on Russia’s expansive tactical and strategic

nuclear capabilities to compensate for weakness in its conventional forces.

While the prospects of China’s forced unification with Taiwan have dominated security analysis in the last few years, China’s ambitions extend much further and include reforming the global governance system to be more in line with its interests. These interests include establishing its own sphere of influence, which places China at odds not only with its regional neighbors concerned about their sovereignty and access to natural resources but also with global nations committed to the rules-based international order.<sup>10</sup> The revelation of Chinese ambitions has been underscored by full-scale conventional and nuclear modernization and expansion. Due to a lack of transparency, China’s intentions for its nuclear force remain opaque. However, each year the Department of Defense’s report, the *Military and Security Developments Involving the People’s Republic of China*, increases its estimate of the future size of China’s nuclear arsenal, with the 2022 report stating China could possess a nuclear stockpile of 1,500 weapons by 2035.<sup>11</sup> The rapid growth of China’s nuclear arsenal allows it to adapt its nuclear strategy in any way it deems necessary to address its security concerns and achieve its strategic objectives.

When comparing the challenges posed by Russia and China to those of North Korea, it is tempting to diminish the threat because it is not to the same scale. But that could be a mistake. Continued advancements in North Korean missile technology and growth of its nuclear force means that it poses a credible threat to the homelands of the United States and our Indo-Pacific allies.<sup>12</sup> Moreover, North Korea’s nuclear doctrine calls for “preemptive and offensive nuclear strike,” with credible nuclear forces capable of preemptive attack and nuclear warfighting.<sup>13</sup> Coupled with North Korea’s history of provocation, the potential for miscalculation on the Korean Peninsula continues to increase.

While it is customary to examine each threat separately, the threats become more acute when examined together. Furthermore, strategists must consider

Maintainers assigned to 393<sup>rd</sup> Expeditionary Bomb Squadron prepare B-2 Spirit for its first hot pit refueling at Ørland flystasjon, Brekstad, Norway, August 29, 2023 (U.S. Air Force/Heather Salazar)



the potential for these adversaries to work in unison to achieve their aspirations, especially given that each adversary has identified the United States and its allies as security threats and an impediment to achieving its national security objectives. Prior to Russia's invasion of Ukraine, China and Russia released a communiqué describing their relationship as a no-limits friendship. While the latest communiqué reframed the relationship as a "comprehensive partnership," what is clear is that cooperation between these two states will continue and grow for the foreseeable future.<sup>14</sup> While North Korea's relationship with China and Russia has often been volatile, with North Korea always careful not to become overly reliant on—and therefore vulnerable to—both nations, recently it has increased its overtures of cooperation to build strategic partnerships with both China and Russia.<sup>15</sup> The prospect of cooperation and potentially collaboration between or among these nations will challenge extended deterrence in the next decades.

### The Assurance Challenge

The terms *extended deterrence* and *assurance* are often used interchangeably, but while the concepts are related, they are focused on different audiences. Extended

deterrence is directed at influencing adversaries to prevent attacks on allies, while assurance is directed at convincing allies of U.S. commitment to their defense. Just as deterrence is a cognitive function in the mind of the adversary, assurance is a cognitive function in the mind of the ally. Both rely on perceptions of the capability, credibility, and will of the United States to defend its vital interests and meet its security obligations.

Assuring allies is inherently difficult. While Thomas Schelling's Nobel Prize-winning research on deterrence described the benefits of uncertainty or "the threat that leaves something to chance" for deterrence, assurance of allies requires a greater level of certainty and credibility because allies are unwilling to leave their security to chance.<sup>16</sup> Nor should they be expected to. This challenge has been deliberated for decades, with analysts and policymakers debating the question, "Would the United States sacrifice San Francisco for Tokyo or Boston for Prague?" It is a question that generates tremendous anxiety for the allies under the nuclear umbrella because their security depends on the answer.

This anxiety is made substantially worse because the most likely pathways for potential nuclear use begin with

regional conventional conflict escalating to limited nuclear use, meaning that our allies are on the frontlines for this threat. Compounding this anxiety are the investments both Russia and China have made into low-yield theater nuclear weapons. These weapons can hold the allies at risk and grow North Korea's nuclear arsenal while potentially lowering the threshold for use. Furthermore, deterring opportunistic aggression in one theater while the United States is fully engaged in another will challenge extended deterrence, heightening allies' anxiety and decreasing their confidence in extended deterrence meeting their security needs.

### Risk to the Nonproliferation Agenda

The 2022 National Defense Strategy reiterates the U.S. commitment to nonproliferation of nuclear weapons, a commitment the United States has held since the mid-20<sup>th</sup> century. A key driver for providing a nuclear umbrella for allies was to reduce the necessity for them to develop their own nuclear capabilities to meet their security needs. This allowed allies to forgo their nuclear ambitions and accede to the Nuclear Non-Proliferation Treaty as nonnuclear states, strengthening the nonprolifera-



tion regime. In fact, the Department of State has stated, “Nuclear umbrella security agreements, whether unilateral or multilateral, have been, and are expected to continue to be, effective deterrents to proliferation.”<sup>17</sup> The risk if allies under the nuclear umbrella lose confidence in extended deterrence, determining that their security needs are no longer met by U.S. guarantees, could potentially put pressure on allies to develop their own nuclear weapons, undermining the nonproliferation regime.

Recently, this risk has become more acute. President Yoon Suk Yeol of South Korea suggested in 2023 that the Republic of Korea may have to consider building its own nuclear weapons to confront its deteriorating security environment. These suggestions came after the announcement that South Korea will stand up its own Strategic Command in 2024 charged with the mission of addressing the North Korean nuclear threat and commanding the South’s strategic forces, to include conventional ballistic missiles, missile defenses, and space and cyber capabilities, to name a few.<sup>18</sup> These moves have been popular with the public, with polling suggesting the South Korean public overwhelmingly supports the country’s acquiring its own nuclear deterrent.<sup>19</sup>

While South Korea has the most public support for developing a nuclear capability, it is not the only nation under the nuclear umbrella contemplating such a move. The governments of both Japan and Australia, traditionally staunchly against building a nuclear capability of their own, have more openly discussed the merits of, at a minimum, nuclear-sharing agreements. Some in the Japanese government have been more forward leaning. Former Japanese Defense Minister Shigeru Ishiba stated in 2017, “Japan should have the technology to build a nuclear weapon if it wants to do so.”<sup>20</sup> Moreover, it must be noted that these nations are more than technically capable of developing nuclear weapons and it is political considerations that have served as a restraint. As those political considerations continue to change, they may no longer serve as a restraint but as a catalyst for proliferation.

### **Mitigating the Risk to Assurance**

Assuring our allies is an imperative, not only for the health of the nonproliferation regime but also for the continued strength of the alliance relationships. The benefits that the United States receives from strong alliances are numer-

ous. These relationships contribute to global stability and prosperity by binding powerful nations together with a shared vision and purpose. Also, by building militaries that are interoperable and exercising in peacetime, these alliance relationships increase the involved nations’ overall military strength, thus enhancing deterrence. Failing to mitigate the risk to assurance could introduce stress into the alliances, undermining cooperation and creating the potential for global instability with the increased risk of arms races and growing competition.

To address the challenge, the United States must remain committed to the nuclear modernization program. The potential for productive relationships with Russia and China, the focus on the war on terror, and continued conflicts in the Middle East resulted in decisions for nuclear modernization being delayed. While the programs are under way, they are at a point that any delay in funding or technical issues may result in an increase in risk.

While it is imperative that the modernization program stays on track, the decisions for the program were made in 2010, in a more benign security environment. Since that time, the increased aggression of Russia, the strategic breakout of China, and the continued



Ohio-class ballistic-missile submarine USS Kentucky arrives for port visit in Busan, Republic of Korea, July 18, 2023 (Screenshot/U.S. Navy Video/Adam Craft)

advancement of North Korea's nuclear program require the United States and allies to reevaluate their strategy to confront these new security threats. NATO has begun that process with the Vilnius Summit Communiqué, announcing a new generation of strategic plans to increase readiness and improve deterrence of threats.<sup>21</sup> However, any new strategy must address the risk to extended deterrence of the two-peer environment and the risk of opportunistic aggression from one adversary if the United States is engaged with the other. Therefore, any strategy for Europe must consider the risk of opportunistic aggression in the Indo-Pacific region and vice versa. This will place additional demands on both the allies and the United States to ensure an effective deterrent.

Although it is tempting to immediately discuss the capabilities needed for extended deterrence and assurance, ensuring that the strategy is sound is a necessary first step. This leads to a more fruitful debate on what capabilities are needed to make the strategy credible. While each leg of the triad is being replaced, a mix of both conventional and nuclear capabilities is necessary to meet

both the military and political requirements for extended deterrence. Militarily, the forces must be survivable and prompt while also capable of holding a variety of adversary targets at risk. Strategically, the forces must provide a persistent presence, be visible to the adversary, while also being acceptable to the ally and potentially providing the option for burden-sharing.<sup>22</sup> Through consultations, the United States and allies should develop a suite of capabilities to make the extended deterrence strategies credible. Working directly with allies will also enhance assurance.

Consulting with allies is imperative for assurance, and to that end, the United States is modernizing and enhancing the processes for consultations within the alliances. Today, these processes are quite different between the Indo-Pacific allies and the NATO allies. There may be benefits in creating NATO-like consultative mechanisms and processes for the Indo-Pacific allies. This would increase assurance by ensuring allies feel that they are actively involved in decisions affecting their security. Additionally, building mechanisms to conduct combined

deterrence planning across deterrence periods and spectrums of conflict will better allow the alliances to integrate deterrence operations. The Washington Declaration has laid the foundation for building these mechanisms with South Korea, announcing the establishment of a Nuclear Consultative Group charged with increasing nuclear dialogue, information-sharing, and strategic planning.<sup>23</sup> Finally, the security environment necessitates that NATO allies and Indo-Pacific allies work together to address security threats. Strengthening relationships across regions and nations will enhance deterrence throughout an increasingly interconnected security environment.

## Conclusion

The grand bargain of extended deterrence is a unique aspect of U.S. alliance relationships. Elaine Bunn, the former Deputy Assistant Secretary for Nuclear and Missile Defense Policy, testified before Congress on this phenomenon, remarking:

*I have come to believe that extended deterrence is amazing from both sides. We have our non-nuclear allies, who have forsworn*

their own nuclear weapons and rely on another country, the U.S., in high-end situations, including nuclear attacks on their own territory and people. And it is amazing that the U.S. takes on the risk and responsibility of putting its own forces, even its population and territory, at risk on behalf of an ally. And that is an amazing fact to the point that some, in the past, have found it incredible.<sup>24</sup>

The emerging two-peer environment will increasingly challenge this “amazing” agreement.

The credibility of extended deterrence is being directly tested by our potential adversaries as they pursue their goals that increasingly challenge the security of the United States and its allies. The consequences of failing to assure allies could dramatically change the international environment. Failing to address the challenges to assurance increases the risk of nuclear proliferation by allies. General Cotton testified to this risk, stating, “The credibility of our extended deterrence commitments is not only part of the nation’s ironclad commitment to our allies, but it’s also essential in limiting proliferation of nuclear weapons.”<sup>25</sup> Mitigating this risk requires reexamining our strategies, designing an extended deterrence posture with both conventional and nuclear weapons to achieve that strategy while modernizing the alliance structures and consultative mechanisms that increase alliance integration. This requires the United States to be open and increase consultations, especially with our East Asian allies, on nuclear deterrence strategies and their respective employment.

Every conflict the United States has fought since World War I has involved allies. They are the greatest asset of the United States, and it is easy to take the U.S. alliance system for granted because of the longevity of the relationships. However, in the next decades, the challenges to extended deterrence and assurance will only increase. The United States needs to take proactive action now to enhance extended deterrence and mitigate the risk to assurance to ensure our allies that the U.S. commitment is “ironclad.” Failing to close the gap might

have consequences that could dramatically reshape the security environment. During World War II, Winston Churchill observed, “There is only one thing worse than fighting with allies and that is fighting without them.”<sup>26</sup> By placing alliances on a solid footing for decades to come, prioritizing extended deterrence and assurance will ensure that the United States does not face Churchill’s worst-case scenario. JFQ

## Notes

<sup>1</sup> Patrick T. Warren, *Alliance History and the Future NATO: What the Last 500 Years of Alliance Behavior Tell Us About NATO’s Path Forward* (Washington, DC: Brookings Institution, June 30, 2010), 51–56, [https://www.brookings.edu/wp-content/uploads/2016/06/0630\\_nato\\_alliance\\_warren.pdf](https://www.brookings.edu/wp-content/uploads/2016/06/0630_nato_alliance_warren.pdf).

<sup>2</sup> “NATO’s Nuclear Deterrence Policy and Force,” NATO, July 5, 2023, [https://www.nato.int/cps/en/natohq/topics\\_50068.htm](https://www.nato.int/cps/en/natohq/topics_50068.htm).

<sup>3</sup> 2022 *Nuclear Posture Review* (Washington, DC: Department of Defense, 2022), 7, <https://media.defense.gov/2022/Oct/27/2003103845/-1/-1/1/2022-NATIONAL-DEFENSE-STRATEGY-NPR-MDR.PDF#page=33>.

<sup>4</sup> *The Secretary General’s Annual Report 2022* (Brussels: NATO, 2022), 25, [https://www.nato.int/nato\\_static\\_fl2014/assets/pdf/2023/3/pdf/sgar22-en.pdf#page=27](https://www.nato.int/nato_static_fl2014/assets/pdf/2023/3/pdf/sgar22-en.pdf#page=27).

<sup>5</sup> The White House, *The Washington Declaration*, April 26, 2023, <https://www.whitehouse.gov/briefing-room/statements-releases/2023/04/26/washington-declaration-2/>.

<sup>6</sup> *Defense of Japan 2023* (Tokyo: Ministry of Defense, 2023), 365.

<sup>7</sup> *National Defence: Defence Strategic Review 2023* (Canberra: Australian Government, 2023), 38.

<sup>8</sup> *China’s Emergence as a Second Nuclear Peer: Implications for U.S. Nuclear Deterrence Strategy* (Livermore, CA: Center for Global Security Research Study Group at Lawrence Livermore National Laboratory, 2023), 47.

<sup>9</sup> Michaela Dodge, *Alliance Politics in a Multipolar World* (Fairfax, VA: National Institute Press, October 2022), 13–18.

<sup>10</sup> Jennifer Bradley, *China’s Nuclear Modernization and Expansion: Ways Beijing Could Adapt Its Nuclear Policy* (Fairfax, VA: National Institute Press, July 2022), 11–16.

<sup>11</sup> *Military and Security Developments Involving the People’s Republic of China 2022: Annual Report to Congress* (Washington, DC: Office of the Secretary of Defense, 2022), ix.

<sup>12</sup> 2022 *Nuclear Posture Review*, 5.

<sup>13</sup> Bruce Klingner, *The Troubling New Changes to North Korea’s Nuclear Doctrine*,

Backgrounder no. 3729 (Washington, DC: The Heritage Foundation, October 17, 2022), <https://www.heritage.org/asia/report/the-troubling-new-changes-north-koreas-nuclear-doctrine>.

<sup>14</sup> Stefan Wolff, “The Russia-China Relationship: The Perils of a ‘Friendship With No Limits,’” *UK in a Changing Europe*, April 5, 2023, <https://ukandeu.ac.uk/the-russia-china-relationship-the-perils-of-a-friendship-with-no-limits/>.

<sup>15</sup> Mike Chinoy, “Kim Jong Un Is Putin’s and Xi’s New Best Friend,” *Foreign Policy*, September 12, 2022, <https://foreignpolicy.com/2022/09/12/north-korea-russia-china-partnership-putin-xi-kim/>.

<sup>16</sup> See Thomas C. Schelling, *The Strategy of Conflict* (Cambridge: Harvard University Press, 1960).

<sup>17</sup> David J. Trachtenberg, “U.S. Extended Deterrence: How Much Strategic Force Is Too Little?” *Strategic Studies Quarterly* 6, no. 2 (Summer 2012), 67.

<sup>18</sup> Daehan Lee, “South Korea to Create New Command That Would Control Strategic Weapons,” *Defense News*, July 11, 2022, <https://www.defensenews.com/global/asia-pacific/2022/07/11/south-korea-to-create-new-command-that-would-control-strategic-weapons/>.

<sup>19</sup> Katrin Fraser Katz, Christopher Johnstone, and Victor Cha, “America Needs to Reassure Japan and South Korea,” *Foreign Affairs*, February 9, 2023, <https://www.foreignaffairs.com/japan/america-needs-reassure-japan-and-south-korea>.

<sup>20</sup> “Japan Should Be Able to Build Nuclear Weapons: Ex-LDP Secretary General Ishiba,” *The Japan Times*, November 6, 2017, <https://www.japantimes.co.jp/news/2017/11/06/national/japan-able-build-nuclear-weapons-ex-ldp-secretary-general-ishiba/>.

<sup>21</sup> *Vilnius Summit Communiqué*, NATO, July 11, 2023, [https://www.nato.int/cps/en/natohq/official\\_texts\\_217320.htm](https://www.nato.int/cps/en/natohq/official_texts_217320.htm).

<sup>22</sup> *China’s Emergence as a Second Nuclear Peer*, 49.

<sup>23</sup> The White House, *The Washington Declaration*, 2023.

<sup>24</sup> Statement of M. Elaine Bunn, *Hearing to Receive Testimony on Regional Nuclear Deterrence*, Senate Armed Services Committee, 118<sup>th</sup> Cong., 1<sup>st</sup> sess., March 28, 2023, Washington, DC, [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).

<sup>25</sup> Cotton, “SASC Fiscal Year 2024 U.S. Strategic Command and U.S. Space Command Posture Hearing.”

<sup>26</sup> “D-Day: FDR and Churchill’s ‘Mighty Endeavor,’” n.d., Franklin D. Roosevelt Presidential Library and Museum, Hyde Park, NY, <https://www.fdrlibrary.org/mighty-endeavor>.