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Project Atom 2024

Intra-War Deterrence in a Two-Peer Environment

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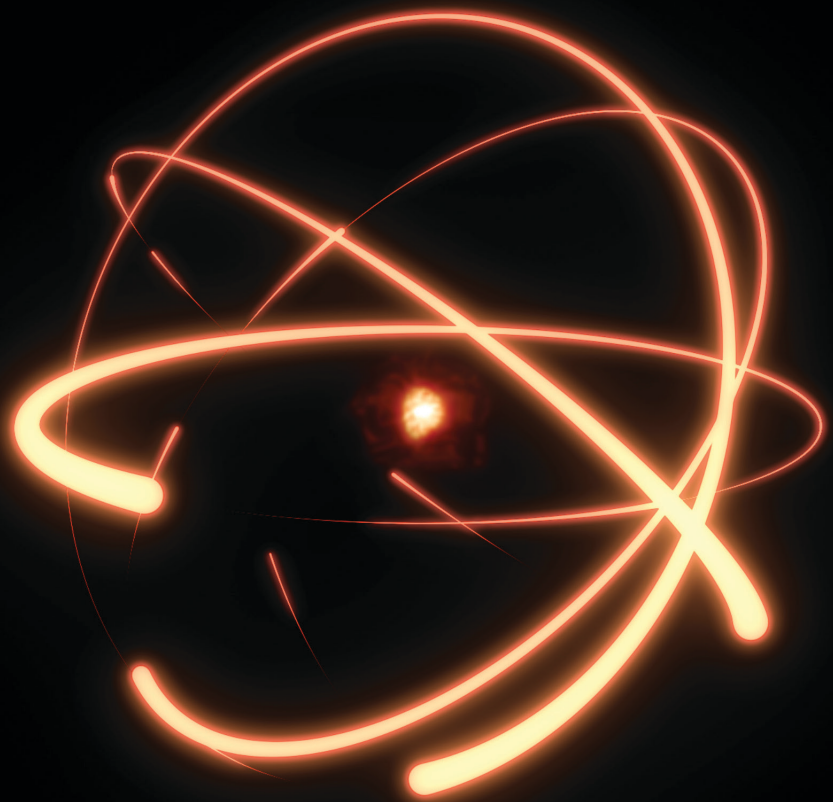
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A Report of the CSIS Project on Nuclear Issues

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Introduction

By Heather Williams, Reja Younis, and Lachlan MacKenzie

There is a growing risk that the United States and its allies could face scenarios in which one or more adversaries might resort to nuclear weapons use in a regional conflict. This risk is especially evident in Russian strategic theory and doctrine, which envisions regional deterrence as complementing global deterrence. Some Russian military experts see the potential use of nonstrategic nuclear weapons for “de-escalation of military actions and their termination on conditions favorable to the Russian Federation,” or “a demonstration to the enemy of resolve to defend [Russia’s] interests by escalating the use of nuclear weapons (tactical) and forcing him to forego further aggression by the threat of use of strategic nuclear weapons.”¹ Statements by North Korean leader Kim Jong-Un indicate that the country’s nuclear arsenal is also intended for deterrence in a regional conflict, such as a potential decapitation strike.² Moreover, China has been rapidly expanding its nuclear arsenal for both military reasons and to gain geopolitical leverage, as argued by Tong Zhao, such as upholding its “core interests” in Taiwan.³

Due to these growing risks of regional crisis escalation with potential for nuclear use, U.S. decisionmakers are revisiting the concept of intra-war deterrence, which is about influencing enemy actions during an ongoing conflict. The risks of deterrence failure have been a focal point in the testimony of recent U.S. Strategic Command (STRATCOM) commanders, including Admiral Charles Richard, who noted in 2020 that STRATCOM conducted analysis into the risks of strategic

deterrence failure, and General Anthony Cotton, who said, “We must be ready if deterrence fails” in testimony in February 2024.⁴ Intra-war deterrence operates on the premise that in an active conflict, threats can be leveraged to shape an adversary’s actions and set boundaries on the intensity and nature of military engagement. This concept underpinned much Cold War strategic thinking. One fundamental challenge of intra-war deterrence is how to balance deterrence objectives with war-fighting objectives. As W. Andrew Terrill writes regarding the mismatch of these objectives, “a state pursuing such [an intra-war] policy is waging war against another nation while seeking to prevent its opponent from responding with all of the weapons that it possesses. Such a task is . . . challenging since both sides usually seek to use as much of their capabilities as possible to optimize their chances of victory.”⁵

To assist in this thinking and to develop actionable insights for the U.S. policy and strategy communities, the Project on Nuclear Issues (PONI) invited a group of experts to develop competing strategies for responding to strategic deterrence failure. This study revives a concept and approach that the Center for Strategic and International Studies (CSIS) developed a decade ago to review U.S. nuclear strategy and posture for 2025–2050. The project’s current contributors were each asked to respond to a scenario involving near-simultaneous battlefield nuclear use by Russia and China. The strategies focused on four specific themes: strategic objectives, assurance to allies, military responses, and non-kinetic responses. The strategies demonstrate agreement on key issues, such as the importance of deterring conventional aggression and the relevance of non-kinetic responses to adversary nuclear use. But the strategies also highlight important areas of disagreement about the relative importance and feasibility of assuring allies, at least relative to other strategic objectives; the advisability of a nuclear versus conventional response to deterrence failure; and what “winning” in a strategic deterrence failure scenario would look like. While many people may disagree with these positions, PONI welcomes a diverse range of views, which can help foster a robust debate. CSIS does not take an institutional view, and the views presented here are those of the individual contributors.

After providing an overview of the authors’ competing strategies, this chapter presents the project’s guiding assumptions and analytic framework. This introductory analysis then distills three principles for intra-war deterrence: establishing (or maintaining) regional deterrence, restoring assurance, and planning precrisis for intra-war deterrence. These principles capture areas of consensus among the strategies while also engaging with areas of disagreement in order to identify which policy options are best suited for the current strategic environment.

Competing Strategies for Intra-War Deterrence

As a foundation for Project Atom’s analysis, PONI provided the authors a scenario that features concurrent nuclear aggression from the People’s Republic of China (PRC) and Russia. The scenario, set in 2027, is predicated on the following assumptions:

- Xi Jinping and Vladimir Putin remain the leaders of the PRC and Russia, respectively.
- The PRC and Russia have not relinquished their territorial claims—that is, the PRC continues to pursue “reunification” with Taiwan, and Russia maintains its claims on annexed Ukrainian territory.

- The war in Ukraine continues as a stalemate. Western aid for Ukraine continues.
- Western sanctions damage the Russian economy and drive continued economic cooperation between Russia and the PRC.
- Russia manages to partially rebuild its conventional military despite low GDP growth, related financial challenges, and ongoing fighting.
- PRC GDP growth stabilizes between 3 and 4 percent, compared to the United States' approximately 2 percent. The two economies remain deeply intertwined.
- The United States and its allies proceed with their planned defense modernization and preparedness efforts. The United States forward deploys additional forces to Europe and the Indo-Pacific.

By March 2027 in this scenario, Taiwan's domestic political landscape has shifted decisively against reunification. In response to pro-independence statements from Taiwanese presidential candidates, PRC officials begin to publicly discuss using military force to achieve reunification. In the ensuing weeks, the U.S. intelligence community observes the beginnings of a PRC military buildup in Fujian Province.

Around the same time as this buildup, Xi and Putin host a summit at which Putin voices support for the PRC's position on Taiwan. The two leaders announce joint naval drills in the Pacific to coincide with Russian conventional and nuclear exercises near Russia's Western borders in mid-May.

In preparation for what they consider an imminent threat, the United States and its allies signal that "wars of conquest will be punished" and bolster their defensive postures through expanded forward deployments and elevated readiness levels in both Europe and the Indo-Pacific. In the weeks preceding the joint PRC-Russian exercise, a Ukrainian offensive makes significant gains and threatens Russian control of Crimea.

On May 14, the joint PRC-Russian naval exercise begins in the Western Pacific. The following day, the PRC begins missile strikes on Taiwan in preparation for a full-scale invasion. On May 16, Russia conducts conventional missile strikes against Polish transportation infrastructure. Xi and Putin release statements justifying their own actions and supporting the other's.

NATO promptly invokes Article 5, and the United States and its allies begin highly successful conventional campaigns against the PRC and Russia. In the Indo-Pacific, U.S. and allied forces interdict PRC landing craft before they reach Taiwan. Heavy People's Liberation Army (PLA) casualties prompt limited anti-mobilization protests across China. In Europe, Polish and Lithuanian forces push into Kaliningrad Oblast and threaten to seize Kaliningrad City. NATO states begin to deploy forces to Ukraine, while Ukrainian forces advance with NATO assistance and prepare for an invasion of Crimea.

On June 2, Russia strikes Polish transportation infrastructure and NATO forces threatening Kaliningrad with low-yield (≤ 10 kt) nuclear weapons, inflicting approximately 1,000 casualties (including some Americans). Putin warns NATO of "total annihilation" if it does not cease its

“aggression.” On June 3, the PRC conducts a 50 kt nuclear strike on a U.S. naval base in the Philippines, resulting in 15,000 casualties. Xi Jinping warns that “Anyone aiding the splitists in Taiwan . . . will face the wrath of a people determined to rejuvenate their nation at any cost.”

Comparing Strategies for Intra-War Deterrence

The PONI team provided experts with four framing assumptions and respective guiding questions as an analytical framework, which are discussed later in this introduction. This report contains five chapters, each of which constitutes a distinct strategy for intra-war deterrence. A comparison of the strategies across the analytical framework is provided in Tables 1-4; discussion of the framing assumptions then follows.

Table 1: Comparing Strategies for Intra-War Deterrence—U.S. Strategic Objectives

U.S. Strategic Objectives	
Ford	<ul style="list-style-type: none"> ▪ Deterrence “failures” are likely derived from assumptions in Moscow and Beijing, not because Western leaders lacked the capacity to respond effectively but because they lacked the will. ▪ The first U.S. objective here is to avoid escalation to a full-scale nuclear exchange with either Russia or China. ▪ The United States has at least two second-order objectives in this scenario. First, it has an incentive to deny Russia and China victory in these regional conflicts (even in conventional terms). Second, it has an incentive to deny Russia and China not just victory in general, but also victory through the use of nuclear weapons in particular. ▪ If the United States were forced to choose between concentrating upon Europe and concentrating upon the Indo-Pacific, Washington should prioritize the latter. ▪ As a status quo power facing revisionist aggression, the fundamental victory requirement for the United States here is thus simply that its adversaries do not “win.”
Gibbons	<ul style="list-style-type: none"> ▪ The best way to prevent these competitors from resorting to nuclear weapons is to ensure that a strong and credible U.S. deterrent posture prevents both from initiating aggression against allies in the first place. ▪ Precrisis messaging is important to avoid this failure. ▪ The primary U.S. objective is to prevent nuclear war. ▪ Secondary objectives include maintaining alliance relationships, ending the conflicts on favorable terms, and ensuring that nuclear use is not perceived to be benefitting the attackers.

U.S. Strategic Objectives

- Panda**
- Deterring adversary nuclear use and strategic deterrence failure will rest on manifesting in the mind of adversarial leaders the prospect of intolerable costs should they proceed, while simultaneously conveying that nuclear use is unlikely to confer tactical or strategic benefit.
 - The chief U.S. objective should be to ensure the avoidance of a general, unlimited nuclear war that could lead to fundamentally unacceptable levels of damage against the U.S. homeland.
 - Victory is far from straightforward, but if the United States responds in kind with nuclear use, victory could amount to a decision by the adversary to seek a termination of the conflict to avoid further damage to their nations or their political control.
-

- Sisson**
- The primary U.S. strategic objective is avoiding general nuclear war.
 - The secondary U.S. strategic objective is for there to be no additional nuclear detonation.
 - Once a nuclear weapon has been used, the overriding U.S. strategic objective is to preserve a future in which humans can live in some form of society that permits more than the base struggle for near-term survival. This confines the definition of war termination on favorable terms.
-

- Weaver**
- It is tempting to say that the United States failed to communicate its stake clearly and credibly in defending its allies and partners in both theaters. However, it is also possible that the Russian and Chinese leaderships miscalculated not about U.S. will to intervene but rather regarding the ability of their own conventional forces to achieve their objectives.
 - The first U.S. strategic objective is to restore or maintain the territorial status quo ante.
 - The second U.S. strategic objective should be to restore deterrence of further nuclear use by Russia or China.
 - The third U.S. strategic objective in both conflicts should be to avoid uncontrolled nuclear escalation.
 - The fourth U.S. strategic objective should be to demonstrate U.S. and allied resolve in the face of adversary nuclear use and to ensure that such use did not result in meaningful political-military gains.
 - In the scenario, there is no clear indication of whether success in one theater is more important than in the other theater.
-

Table 2: Comparing Strategies for Intra-War Deterrence—Assuring Allies

Assuring Allies	
Ford	<ul style="list-style-type: none"> ▪ There are two levels of U.S. credibility about which U.S. allies have reason to be concerned here: (1) U.S. willingness to confront a great power in order to defend its allies; and (2) the reliability of the U.S. nuclear umbrella. ▪ Considering the current facts of this scenario, this paper contends that use of U.S. nuclear weapons is not yet necessary. ▪ Extended deterrence is multifaceted and includes conventional forces.
Gibbons	<ul style="list-style-type: none"> ▪ The Philippines poses the greatest challenge within alliances and partnerships. ▪ Continued U.S. engagement in conflicts and strong responses to attacks signal resolve. ▪ All allies fear follow-on attacks and expect a strong U.S. response. ▪ Allies and partners have an important role to play in the messaging following attacks. Unified public condemnation is essential.
Panda	<ul style="list-style-type: none"> ▪ The risks of allies questioning U.S. credibility in the event of strategic deterrence failure are substantial and likely insurmountable in the context of the scenario, provided Washington pursues a course of action that prioritizes its own national survival and immunity from nuclear attack. ▪ It is highly likely that, following strategic deterrence failure, allied perceptions of the credibility of the United States would suffer drastically unless Washington opted for nuclear use in kind, which would present substantial risks and is unlikely to be preferable to most plausible presidents.
Sisson	<ul style="list-style-type: none"> ▪ In both regions, U.S. political objectives will need to be supported, and its warfighting operations aided, by local allies. ▪ The United States can attempt to address allied concerns by reinforcing that the purpose of these non-maximalist political objectives is to protect the alliances' shared interest in averting the least favorable conflict outcomes: (1) concession to Russian and Chinese maximalist demands, or (2) an uncontrolled escalatory spiral that begins with nuclear detonations on allied territories and ultimately escalates to general nuclear war and all-out nuclear exchange.

Assuring Allies

- Weaver**
- Allies might be concerned that the United States will not respond forcefully enough to either restore deterrence or continue to defend their vital interests, for fear that the conflict might escalate out of control and put the U.S. homeland at risk. Conversely, allies might fear that the U.S. response to adversary nuclear escalation will elicit further adversary nuclear escalation in the theater, putting them at increased risk.
 - If the U.S. response results in further Russian or Chinese nuclear use against U.S. allies and partners, allied confidence will likely decrease. Once deterrence has failed—evidenced by limited adversary nuclear use against U.S. allies or partners—allies will want to be reassured about the United States’ ability to defend them against such attacks, not just deter such attacks.
 - If the United States succeeds in achieving its objectives while avoiding uncontrolled escalation, allies are likely to be assured.
-

Table 3: Comparing Strategies for Intra-War Deterrence—Military Response Options

Military Response Options

- Ford**
- All relevant U.S. (and NATO) conventional assets should be readied to operate in a radiological-nuclear combat environment as quickly as possible.
 - Disperse conventional capabilities—not merely land and naval units near the zone of operations but also aircraft from vulnerable bases as well as a wider variety of auxiliary dispersed locations, including those dual-capable aircraft (DCA) that would be needed for nuclear attack missions (i.e., unilateral U.S. assets in East Asia and NATO “nuclear-sharing” aircraft in Europe)—to demonstrate resolve, unity, and collective preparedness.
 - U.S. nuclear weapon storage vaults at relevant European airfields should be readied for potential operations.
 - U.S. strategic nuclear forces should be put on a heightened alert level.
-

Military Response Options

- Gibbons**
- Timely and precise conventional attacks should be conducted on the military bases or installations responsible for supporting and conducting the nuclear attacks, though not command and control capabilities.
 - These conventional attacks should be accompanied by clear assurances both in public and private that the United States does not seek regime change in the PRC or Russia.
 - Clandestine operations employing special forces teams should be considered that would degrade key adversary capabilities.
-

- Panda**
- The United States should opt for a limited conventional strike against the nonstrategic and regional nuclear force units involved in the strikes against Poland and the Philippines. It should simultaneously employ a diplomatic strategy that seeks to persuade these allies as to the inadvisability of a nuclear response, which could beget further nuclear use against their own territories.
-

- Sisson**
- Kinetic and cyber military attacks should be conducted only on those locations in contiguous Russia or on the Chinese mainland that are directly engaged in conventional kinetic or confirmed cyber-warfighting activity. This will demonstrate restraint by not engaging in tit-for-tat nuclear actions, including posture, alert, or deployment changes.
 - U.S. warfighting strategy should use conventional forces to try to prevent either adversary from advancing the current lines of contact as described in the scenario while also ensuring that the United States does not advance the line of contact either.
-

- Weaver**
- Regarding Russian escalation, the United States should execute low-yield nuclear strikes on key military targets in Kaliningrad, paired with clear messaging that Russia must halt further nuclear use and that U.S. war aims are limited to restoring the territorial status quo ante vis-à-vis NATO (and possibly a return to the pre-February 2022 borders in Ukraine).
 - Regarding China, the United States should pursue a response in kind on three of the militarized islands in the South China Sea: Mischief Reef, Subi Reef, and Fiery Cross. Such strikes would not affect the Chinese mainland and, given the U.S. position on territorial disputes in the South China Sea, would not constitute attacks on Chinese territory.
-

Table 4: Comparing Strategies for Intra-War Deterrence—Non-Kinetic Response Options

Non-Kinetic Response Options	
Ford	<ul style="list-style-type: none"> ▪ The United States should consider engaging in cyber or electronic warfare (EW) degradation of air defense activity or battlefield command, control, and communications (C3) networks; jamming or spoofing of adversary positioning, navigation, and timing (PNT) communications for engaged combatants; pursuing cyberattacks on infrastructure or transportation capabilities that directly contribute to the fight in theater; or jamming space assets in connection specifically with their support to theater operations. ▪ At least initially, care should be taken to avoid non-kinetic measures that might be interpreted as having existential implications (i.e., “regime change”).
Gibbons	<ul style="list-style-type: none"> ▪ The United States should utilize tools of the global financial system to hurt the PRC and Russian economies. ▪ The United States should consider conducting cyberattacks on the adversaries that are initially limited and measured, but which could signal the possibility of attacks with greater effect if the conflict continues. ▪ The United States should issue strong statements to all audiences, foreign and domestic, about how the PRC and Russia have broken a strong taboo in international relations.
Panda	<ul style="list-style-type: none"> ▪ The United States should pursue broad diplomatic messaging to allies, partners, and the nonaligned world aimed at obtaining unconditional condemnation of Russia and China for resorting to the first use of nuclear weapons in war in more than 80 years. ▪ The United States should marshal diplomatic resources to seek a broad, international coalition condemning both countries. ▪ The United States should consider intelligence declassification as a tool to counter Russian and Chinese disinformation. ▪ International economic sanctions should be enhanced, though the efficacy of these sanctions is likely to be limited. ▪ The United States should conduct cyber operations against both Russia and China.

Non-Kinetic Response Options

- Sisson**
- Diplomatic and economic measures are unlikely to be effective in deterring adversary aggression but may be useful in hindering adversaries' warfighting capabilities and as an inducement for negotiations.
 - The United States can use cyber actions to enhance its kinetic warfighting activities, but these actions should target only Russian and Chinese military units and assets and adhere to international humanitarian law.
-
- Weaver**
- The United States should use messaging alongside military responses to communicate its limited objectives to adversaries.
 - The United States should use information actions to make the adversary a pariah for having been the first to violate the nuclear taboo since 1945.
 - The United States should similarly use information actions to convince both elements of Russian and Chinese national leadership and the Russian and Chinese populations that their leaderships' actions are risking large-scale nuclear war and the destruction of their nations.
 - The United States should use economic actions to make clear that the longer the adversaries continue the war, the more significant the economic damage they will incur.
-

Framing Assumptions

U.S. STRATEGIC OBJECTIVES

Assumption #1: In the event that strategic deterrence fails and an adversary has used a single or multiple nuclear weapons, the United States will be forced to confront competing priorities to uphold security commitments to allies, manage further escalation, and resolve the conflict on terms favorable to the United States. The adversaries may assume they have more at stake in a regional crisis than the United States and thereby question U.S. resolve. This raises the following questions with regard to U.S. strategic objectives in the event of strategic deterrence failure:

- In what ways, if any, did the United States fail to demonstrate resolve and commitment to its strategic objectives in the lead-up to nuclear use? Why did deterrence fail? Could anything have been done to prevent strategic deterrence failure?
- What are the United States' core objectives in this scenario, and how should the United States prioritize its strategic objectives? Is one area of operations more important than another in this scenario?
- What does "winning" look like? How would the United States know if deterrence has been "restored"?

Identifying and prioritizing strategic objectives will be critical following adversary nuclear use, and this will require understanding why deterrence failed. Authors reached different conclusions on this point. Ford, on one hand, concludes that deterrence failed because of adversary perceptions about U.S. credibility that had built up over years. He argues that there may have been nothing that U.S. policymakers could have done to deter adversary aggression in the immediate run-up to the crisis. Panda, on the other hand, points to the swift defeat of adversary conventional forces as a primary driver of escalation, adding that the adversary may believe that limited nuclear use can deter the United States from further involvement. Weaver suggests that the United States may have failed to credibly signal its resolve to defend its allies and partners but acknowledges that deterrence failure may have alternatively stemmed from adversary miscalculations about their abilities to fight and win conventional conflicts against the United States and its partners.

While the authors agree about the importance of avoiding full-scale nuclear war following deterrence failure, they disagree about the relevance and prioritization of other strategic objectives. Sisson, for example, identifies only two U.S. strategic objectives: preventing general nuclear war and preventing further nuclear detonations of any type in any location. Similarly, Panda writes that “no objective should be greater for the president of the United States than ensuring that the survival of the country is not threatened by the prospect of uncontrollable escalation into a general nuclear war.” Ford and Gibbons also both list avoiding nuclear war as the primary U.S. objective but identify a range of secondary strategic objectives, including denying the adversary battlefield victory, denying the adversary any advantage specifically from having used nuclear weaponry, and maintaining alliance relationships. Conversely, Weaver lists four strategic objectives: (1) restoring the territorial status quo ante; (2) restoring nuclear deterrence; (3) avoiding general nuclear war; and (4) denying the adversary any benefit from nuclear use.

ASSURING ALLIES

Assumption #2: The United States will remain committed to allies’ security and their vital national interests in the event of strategic deterrence failure. For example, if NATO Article 5 is invoked, the United States will respond. Therefore, at least one U.S. objective (from above) will be continuing to assure and demonstrate credibility and resolve to allies. Partners, however, remain in a somewhat ambiguous position in the event of direct military attacks or nuclear strikes. This raises the following questions with regard to allies and partners in the event of strategic deterrence failure:

- What are the risks—and their likelihoods and potential consequences—of allies questioning U.S. credibility in the event of strategic deterrence failure?
- What will be allies’ security concerns in the event of strategic deterrence failure? What role might certain allies and partners play in a response?
- How can the United States signal resolve to allies in the event of strategic deterrence failure? How does this differ from signaling resolve to non-treaty partners?

Based on their differing assessments about the most pressing U.S. strategic objectives, the authors disagree about the importance and feasibility of assuring allies following adversary nuclear use. Panda argues that, given that any U.S. president is likely to prioritize protecting the U.S. homeland

above all, severe damage to U.S. credibility is a forgone conclusion in the event of strategic deterrence failure. He writes that the United States would face “insurmountable” assurance and credibility challenges following nuclear use and that “it is highly likely that following strategic deterrence failure, allied perceptions of the credibility of the United States would suffer drastically.” Sisson suggests that the defense of Ukraine and Taiwan should be a primary U.S. war aim but maintains that avoiding further nuclear use of any type should be the United States’ first objective.

Ford, Gibbons, and Weaver, on the other hand, argue that assuring allies should be one of the United States’ primary strategic objectives. Ford and Gibbons both suggest that a nuclear response to deterrence failure is not necessary to reassure allies. Ford writes that the United States is not obligated to use any specific weapons in defense of its allies, as long as it does effectively defend them against aggression. He also argues that that, on the facts of the scenario, “continuing to prosecute a successful conventional campaign” and deny the adversary any benefits from nuclear weapons use “should represent an optimal answer from U.S. allies’ perspectives.” Weaver offers that the U.S. response that deters further aggression while avoiding uncontrollable escalation will be the optimal response from an allied perspective.

MILITARY RESPONSE OPTIONS

Assumption #3: The president will consider a combination of kinetic and non-kinetic response options in the event of strategic deterrence failure. Options might include the use—or explicit threatened use—of nuclear weapons, naval deployments, or boots on the ground. This raises the following questions with regard to military response options in the event of deterrence failure:

- What would be the president’s military options in the event of strategic deterrence failure? Which of these options would you recommend to the president?
- What are the risks associated with a military response?
- What are the signaling objectives of military response options? How will these options contribute to conflict termination on terms favorable to the United States?
- In the event of strategic deterrence failure, how strictly should the United States observe the law of armed conflict (i.e., principles of proportionality and discrimination)? How much should it influence the strategy?

While the authors agree on the need for some form of military response to adversary nuclear use, their proposed responses differ significantly. Panda, Ford, and Gibbons each recommend conventional responses to adversary nuclear use. Gibbons and Panda endorse conventional strikes against the adversaries’ forces that were directly responsible for nuclear strikes against U.S. partners and allies. Though he argues that the United States needs to be prepared to use nuclear weapons if the adversaries were to use them again, Ford suggests that U.S. and allied forces should “fight through” adversary nuclear use here and continue their already successful conventional campaigns with slight changes in posture to better prepare for the possibility of further adversary nuclear use.

Weaver is the only author to propose a nuclear response. He concludes that a conventional response would be problematic for several reasons, including that it may simply encourage adversaries to escalate further.

Sisson proposes the most restrained response to adversary nuclear use. She suggests that, to avoid further escalation, U.S. and allied forces should cease offensive military operations and look instead to hold the line against further adversary aggression and rely on non-kinetic options.

NON-KINETIC RESPONSE OPTIONS

Assumption #4: The U.S. political and military leadership would consider non-kinetic response options across the diplomacy-information-military-economics (DIME) spectrum. Many of these capabilities might overlap across domains, and the authors were given discretion to decide what are military versus diplomatic, information, economic, or other non-kinetic response options. Possibilities such as economic sanctions, building international pressure, or information operations would likely be part of the U.S. response to a strategic deterrence failure. This raises the following questions with regard to non-kinetic response options in the event of deterrence failure:

- What would be the president's non-kinetic options in the event of strategic deterrence failure? Which of these options would you recommend to the president?
- What are the risks associated with a non-kinetic response?
- What are signaling objectives of non-kinetic response options? How will these options contribute to conflict termination on terms favorable to the United States?

The authors generally agreed about the importance of non-kinetic measures in responding to adversary nuclear use. One area of commonality was the importance of non-kinetic deterrence efforts *prior* to nuclear use during the crisis. Most suggested some form of information warfare or targeted messaging to accompany their proposed military responses, as well as non-kinetic military measures and economic retaliation. Weaver, for example, proposes information operations to maximize international backlash to adversary nuclear use and convince the Russian and Chinese people that their governments' actions risk large-scale nuclear war, as well as measures to impose economic costs on Russia and China. Ford, Gibbons, Sisson, and Panda each suggest cyberattacks against adversary forces, as well as economic retaliation. Moreover, Gibbons, Sisson, and Panda advocate for diplomatic messaging to the international community to build a coalition condemning Russian and Chinese nuclear use. Panda proposes intelligence declassification as a tool to counter adversaries' information operations.

Three Principles for Intra-War Deterrence in a Two-Peer Environment

Based on the expert papers, the PONI team identified three broad principles for thinking about and planning for intra-war deterrence in a two-peer environment. At the outset, however, it is worth observing that intra-war deterrence is highly context dependent, and many of the recommendations of these papers might not be applicable to other intra-war deterrence scenarios,

to include whether to respond with nuclear or conventional weapons and how to assure allies. The stakes will depend on the context. In the scenario provided here, what is at stake is allies' sovereignty and security and U.S. global leadership, but these must be balanced with the stakes of escalation, which could include further humanitarian consequences depending on whether conventional or nuclear weapons are used.

INTRA-WAR DETERRENCE REQUIRES REGIONAL DETERRENCE

In these scenarios, America's adversaries are acting on the belief that they have more at stake in the region than the United States. Ford describes the strategic challenge: "Both of these failures [are] likely derived from assumptions in Moscow and Beijing, not that Western leaders lacked the *capacity* to respond effectively, but that they lacked the *will* . . . It is the primary task of intra-war deterrence here to convince them that this, too, was a misapprehension." As demonstrated by all of the papers in this volume, the United States will need a diverse and flexible tool kit, to include regional nuclear capabilities and conceal/reveal capabilities.

While only one of the papers calls for the United States to respond with nuclear weapons, nearly all of the authors acknowledge the importance of the United States having a breadth of nuclear response options. For Panda, this is largely tied to assuring allies because "it is highly likely that following strategic deterrence failure, allied perceptions of the credibility of the United States would suffer drastically unless Washington opted for nuclear use in kind," although he expresses concerns with risks of escalation. For Ford, amid a conventional response, "U.S. nuclear weapon storage vaults at relevant European airfields should also be readied for potential operations, and any existing plans for weapon dispersal to additional airfields that do not involve actual DCA attack assets should be implemented."

These and other points make a case for the United States to improve its regional deterrence posture through increased regional capabilities and flexible options in order to prepare for a proportionate nuclear response in a limited-use scenario. U.S. policymakers should strive to diversify U.S. nuclear forces through investments in new regional capabilities so that the president will have a broader range of credible options, particularly if an adversary threatens limited nuclear attacks. The capabilities should be survivable, lower yield, and responsive and effective across a spectrum of targets. Strategic deterrence is, and should remain, the primary mission of the U.S. nuclear force, and the triad is essential to the success of that mission. These capabilities will play a deterrence function not only during a crisis but also beforehand, as argued by Weaver:

If the effect of selecting a nonnuclear response to adversary nuclear escalation is to convince the adversary that the United States is so concerned about uncontrolled escalation that it fears responding in kind, then a U.S. nonnuclear response could actually increase the risk of eventual uncontrolled escalation. This may seem counterintuitive, but if a U.S. nonnuclear response to adversary limited nuclear use results in encouraging further adversary nuclear escalation, then the U.S. nuclear responses that may eventually be required to achieve U.S. objectives are likely to be larger in scale and more provocative in their effects. This could well make uncontrolled escalation more likely.

Another option for re-establishing deterrence would be relying on conceal/reveal capabilities, such as demonstrating a previously unknown capability amid a crisis to inspire the adversary to exert caution. As described by Weaver, “There is a potential role here for the calculated revelation of capabilities the adversary was previously unaware of that have potentially decisive military effects (‘You didn’t tell me they could do *that*. What else don’t I know?’).” Conceal/reveal capabilities could also offer U.S. decisionmakers more flexibility in a crisis, as well as having a powerful deterrence impact when needed most to de-escalate a crisis.

RESTORING DETERRENCE REQUIRES RESTORING ASSURANCE

As multiple authors identify, a strategic deterrence failure could inspire a crisis of confidence among U.S. allies and partners. While some of the papers in this volume call for reconsidering U.S. security commitments to allies in a crisis, this would be a mistake for both short- and long-term reasons. Amid the ongoing conflict, the United States would need allies to fight through a scenario such as the one outlined in one or both theaters. While Ford argues that the Indo-Pacific theater is the more important of the two, he notes that “a Western loss in the European theater” would still be “a disaster.” For him, “[j]ust as the United States prioritized defending Europe from the Nazis in World War II without backing off against Japan in the Pacific, even if the United States must now prioritize East Asia in certain ways, it should not abandon Europe.” Ford, for example, points to the importance of European allies in leading on conventional fighting and re-establishing deterrence in one theater while the United States focuses on the Indo-Pacific. For Weaver, “If U.S. responses to initial Russian or Chinese escalation make clear that the United States is willing to engage in a competition in dire risk-taking, and that Russia and China must also fear potential uncontrolled escalation, allies are likely to be reassured in the near term.” Over the long term, alliance structures would be an essential component for any eventual peace settlement and post-conflict international order, assuming a U.S. objective is to maintain global leadership, as argued in nearly all of these papers.

Gibbons points to an additional value of maintaining and assuring allies: they can play a crucial role in generating international condemnation aimed at deterring further nuclear use by the adversaries:

Allies and partners have a significant role to play in the messaging following nuclear use. They must unite in loudly and publicly condemning the nuclear attacks and should do so repeatedly. They should communicate that using nuclear weapons in these scenarios was unacceptable and neither nation will gain from using these weapons. These messages are key to reestablishing the nuclear taboo following nuclear use.

Gibbons goes on to make the case for U.S. policymakers to immediately engage the U.S. public on the importance of allies, for example. The United States could also develop an engagement plan for deepening planning and consultations with allies on potential battlefield nuclear use and opportunistic aggression scenarios. A series of mini tabletop exercises could begin familiarizing allied and U.S. government officials across the interagency, including at the Department of State, the National Security Council, and the Department of Defense (including combatant commands) with how deterrence works and how battlefield nuclear use might impact both conventional campaigns and deterrence dynamics.

INTRA-WAR DETERRENCE WILL DEPEND ON PRECRISIS PLANNING AND DECISIONS

Finally, intra-war deterrence will largely depend on precrisis decisions and planning. These comprise decisions and actions taken with adversaries, allies, domestic audiences, and wider international ones. Examples include dialogue with allies about crisis communication and decisionmaking, conceal/reveal capabilities, and establishing thresholds and threats (i.e., do not bluff). There are at least two main areas where the United States can focus on intra-war deterrence planning before a crisis begins: strategic communications, particularly with international audiences, and wargaming.

Shaping narratives and messaging before and during crises will be essential. Such messages will need to be tailored to multiple audiences: allies (focusing on assurance), domestic audiences (focused on the importance of U.S. alliances, and in support of achieving U.S. military responses to adversarial limited nuclear use), international audiences (aimed to “make the adversary a pariah,” as Weaver argues), and adversarial domestic audiences (meant to foment a facts-based public consensus). When facing a crisis involving potential limited nuclear use, strategic communication must be multifaceted. Messages must be tailored to diverse audiences (allies, the U.S. public, the international community, adversary leadership, and their citizens) and adapted for each stage of the crisis, including preemptive communication. For example, before a crisis, messages aimed at the U.S. population should focus on the importance of alliances. As Gibbons argues, “Before any potential conflict—and frankly, right now—the U.S. government, especially the president, should aim to better educate the public about the history of U.S. alliance relationships and their benefits.” Precrisis messaging to Americans could also focus, for example, on reassuring the U.S. public about U.S. commitment to deterrence and the limited nature of any potential nuclear response.

Precrisis engagement with international audiences (particularly the Global South and “non-aligned” states) was raised in several analyses. Gibbons writes:

It is worth emphasizing here that improving U.S. and allied relations with states within the Global South before this notional conflict in 2027 is paramount. Though the international community broadly supported the 2022 UN General Assembly resolution condemning Russia’s attack on Ukraine, there have been fewer governments that have unilaterally condemned the attack or Russia’s nuclear saber-rattling, even among members of the Treaty on the Prohibition on Nuclear Weapons, a treaty that explicitly bans nuclear threats.

A second priority for precrisis intra-war deterrence will be more wargaming. One way to address this challenge is with more wargames through all stages of escalation, as highlighted in Weaver’s paper in particular. But Sisson also writes, “Each phase of a scenario exercises the thought processes involved in aligning military operations with war aims, and war aims with strategic objectives, under conditions in which some variables that might affect the likelihood of success are foreseeable and controllable and some are not.” Variations of these aims, objectives, and conditions can be explored through wargaming or other exercising. One particular scenario that would be worth exploring is coordination among allies, which is somewhat ambiguous in the scenario used for this study. Even with additional gaming and empirical data, however, there will be limits on knowledge about what happens after nuclear use and how to re-establish strategic deterrence.

As Weaver argues, “Detailed wargaming and simulation is needed to analyze the ways in which limited nuclear use by both sides affect the course of twenty-first-century conflict and escalation dynamics across a range of scenarios and strategic circumstances. Without such analysis, U.S. efforts to identify the range of nuclear options needed to address limited nuclear escalation will risk missing key insights.” More comprehensive wargaming of the central problem could require asking these same questions across a set of plausible scenarios that span the range of key strategic circumstances the United States might face. Examples of other scenarios that should be examined using the Project Atom 2024 methodology include

- Conflict with Russia while deterring Chinese opportunistic aggression
- Conflict with China while deterring Russian opportunistic aggression
- Conflict with Russia and China in which the United States is winning conventionally in one theater and losing in the other when deterrence of limited nuclear use fails
- Conflict with Russia and China in which the United States is losing conventionally in both theaters when deterrence of limited nuclear use fails
- The full range of scenarios farther into the future when China is a nuclear peer

It is worth acknowledging that even with additional gaming and empirical data, there will be limits on knowledge about what happens after nuclear use and how to re-establish strategic deterrence. However, analysis of additional scenarios and circumstances would likely produce new and important insights regarding the four key issues addressed in this project, to include opportunities for de-escalation and identifying off-ramps.

There are a host of other opportunities for strengthening intra-war deterrence before a crisis begins. The United States and its allies may have to be prepared to fight and operate in a chemical, biological, radiological, or nuclear (CBRN) environment, which will require troop protection, equipment, and training. These preparations could also serve a deterrent function by demonstrating U.S. commitment to prevailing in defense of its allies, even in a CBRN environment.

Conclusion

To state the obvious, contemplating how to respond to nuclear weapons use and strategic deterrence failure is deeply uncomfortable. Such a scenario could involve hundreds of thousands (perhaps millions) of casualties, environmental disasters, and the potential for further damage. Indeed, Sisson’s paper starts with the assumption that any nuclear detonation could quickly escalate to civilization-threatening general nuclear war. Ideally, the international community would condemn such attacks and impose heavy costs. But the United States also needs to be prepared to restore deterrence and end the conflict on terms favorable to the United States and its allies. In many of these scenarios, allies’ sovereignty is at stake.

This report’s recommendations point to an urgent need for renewed engagement among policymakers and publics on nuclear issues. The stakes could not be higher, as it is the risk of repeated nuclear exchanges as well as the United States’ global leadership and credibility that are

on the line. More regional nuclear capabilities will give U.S. planners more rungs on the escalation ladder for restoring deterrence without resorting to large-scale exchanges. They will also give the U.S. president more options in the event of a horrific scenario such as the one outlined here. A future U.S. president must be willing and able to employ nuclear weapons in response to a strategic deterrence failure scenario—and will therefore require flexible, limited options to navigate a scenario of limited nuclear use effectively. Whether a conventional or nuclear response to adversary nuclear use will be more effective in re-establishing deterrence and achieving U.S. objectives will depend on adversary motivations and the specific context of deterrence failure; while a nuclear response may be appropriate in certain scenarios, the same response could be unnecessary and escalatory in others. It is critical, however, that a U.S. president be able to employ whatever military response they determine to be most effective. The United States may therefore benefit from a more diverse nuclear force with a wider range of theater nuclear capabilities. Strategic investments in modernizing, diversifying, and enhancing the resilience of existing deterrent forces will strengthen deterrence and help avoid intra-war deterrence scenarios in the first place. By anticipating scenarios in which adversaries escalate regionally, potentially concurrently, the United States and its allies can strengthen deterrence and reduce the likelihood of adversaries exploiting perceived weaknesses. Preparing for multiple scenarios is not about seeking war but about enhancing deterrence to prevent it altogether.

In addition to these capability considerations, U.S. decisionmakers can start laying the groundwork now for intra-war deterrence, to include increased and improved wargaming and tabletop exercises, including with allies. And U.S. military and strategic planners, along with policymakers, must immediately consider the question of how to restore assurance alongside deterrence.

Challenges of Deterrence and Security upon Nuclear Use

By Christopher A. Ford

The following pages respond to questions posed by the organizers of Project Atom 2024.

U.S. Strategic Objectives

ASSESSING DETERRENCE'S "FAILURE"

The locus of deterrence “failure” here may lie not so much in the specific run-up to the crisis outlined in Project Atom 2024, but potentially *years* earlier. In this scenario, U.S. and allied leaders were stepping up their military preparedness before war broke out, and were very clear publicly that “wars of conquest will be punished.” Western posture and policy statements, in their own terms, left little basis for U.S. adversaries’ apparent conclusion either that: (a) the United States would not contest aggression in the first place; or (b) the United States could be frightened into intra-war concessions by adversaries’ use of nuclear weapons.

Rather, irrespective of what the United States declared in the run-up to war, U.S. adversaries seem to have assumed that the United States and its allies were: averse to war in general; incapable of waging war effectively or on a sustained basis; and sufficiently afraid of nuclear escalation that Beijing and Moscow could enjoy the benefits of aggression without facing prohibitive risk. This assumption would appear to be rooted not in assessments of specific Western actions undertaken in this scenario, but rather in antecedent beliefs, accumulated over time, about fundamental

weaknesses and risk-aversion in Western leadership and societies, coupled—presumably—with the conclusion that the aggressors could draw upon greater resources of martial seriousness and societal stamina in waging war, and that the stakes involved in each theater favored the nearer, “hungrier” power over the distant and more diffident United States and its weak and degenerate local friends.

Deterrence of this aggression, in other words, arguably failed in Project Atom 2024 much the same way that deterrence of Russia’s 2022 attack on Ukraine failed not in 2021–22 but in 2014—when Vladimir Putin, observing Western reactions to his annexation of Crimea and invasion of the Donbas, seems to have concluded that they would not react forcefully “next time” either. In the scenario presented here, the failure was twofold: the United States and its allies failed to deter Russia and China from undertaking wars of conventional military aggression, and then further failed in deterring them from using nuclear weapons when things on the battlefield began to go bad. Both of these failures likely derived from assumptions in Moscow and Beijing not that Western leaders lacked the capacity to respond effectively, but that they lacked the will—and hence were more tied to general and longer-term adversary assessments than to specific U.S. or allied posture and signaling failures in the run-up to the crisis.

If so, this suggests that the efficacy of deterrence lies not only in clear military postures and public messaging, but also in an adversary’s underlying, longer-term assumptions about the character, motivation, and sociopolitical support enjoyed by those adopting such postures and sending such signals. If the adversary power has concluded that one is fundamentally timid and conflict averse—or simply unable to wage a war with resolution and commitment anyway—that adversary is less likely to be deterred by short-term precrisis signals even if they do, on their face, convey admirable resolution.

Nevertheless, the more immediate problem for Western leaders in this situation lies not in addressing such deeper challenges but in managing escalation risks and restoring deterrence now that bullets have started flying.

If U.S. adversaries assumed that the West’s sociopolitical weakness and fears of nuclear escalation would preclude its responding effectively to conventional aggression by a nuclear-armed great power in this scenario, of course, they were wrong. Since they also seem to have assumed that even their very limited tactical use of nuclear weaponry would scare the United States into abandoning its response to their aggression, it is the primary task of intra-war deterrence here to convince them that this, too, was a misapprehension. To the degree that the United States can do this, it has a chance not merely to manage this scenario, but also to help shape U.S. adversaries’ more general perceptions of the United States in ways that will enable maintaining deterrence once peace is restored. (After all, it is much less plausible to argue that a country will not fight you next time when it has just surprised you, this time, by demonstrating that it actually will.)

CORE U.S. OBJECTIVES IN THIS SCENARIO

Given the potentially existential implications, the first U.S. objective here is to avoid escalation to a full-scale nuclear exchange with either Russia or China. It would be a mistake, however, to conclude

from this that the best way to achieve this requires backing down, or that this is the United States' only important objective. On the contrary, making no response to the Russian and Chinese use of nuclear weapons in this scenario—or acting in a way that would reward such use with terrified Western de-escalation and hence cede theater-level advantage (or even victory) to the aggressor or convince that aggressor that the United States was abandoning its commitments to its allies—may actually increase the risk of broader war and even a full-scale exchange sooner or later, more than would a response of judicious firmness that denies them such benefits and makes clear that the United States stands with its friends and is not entirely unwilling to turn up the heat further.

The United States has at least two second-order, but nonetheless extremely important, objectives in this scenario. First, it has an incentive to deny Russia and China victory in these regional conflicts (even in conventional terms) and to make good on U.S. commitments to its allies, because were the United States to lose or weaken those alliances, this would open the door to untold future revisionist aggression and upend the international order upon which U.S. prosperity and that of the United States' most important international trading and security partners depends.

Second, the United States has an incentive to deny Russia and China not just victory in general, but also victory *through the use of nuclear weapons* in particular. Rewarding their attempt at nuclear coercion would presumably lead to more aggressive employment of such approaches by Russia and China in the future, hence leading to more wars and greater risks of a full-scale nuclear exchange.⁶ Rewarding such coercion and aggression, moreover—and demonstrating the inability of U.S. alliance structures to deter them—would also encourage defensive nuclear proliferation to (and perhaps future offensive nuclear-facilitated coercion by) others as well.

PRIORITIZING THEATERS

A more difficult question is whether, in this scenario, the United States should prioritize one theater over the other. They present different military-operational situations, with the conflict against Russia being primarily a land war and that against China emphasizing naval power projection, although both would require significant air power. For this reason, each region is likely to draw most heavily upon somewhat different mixes of U.S. military capabilities and assets. It is conceivable, therefore, that the United States might not face unmanageably stark prioritization choices.

Nevertheless, if the United States were forced to choose between concentrating upon Europe and concentrating upon the Indo-Pacific, Washington should prioritize the latter. Even if Russia succeeds in carving out for itself some kind of neo-tsarist imperium in Eastern Europe, Moscow lacks the economic, demographic, and material resources to hold it over the medium-to-long term, especially if confronted by strong and sophisticated adversaries. An allied loss in the Polish-Lithuanian theater in this scenario would be devastating, but even then, a sufficiently alarmed, angry, and resolute Europe could likely still—even alone—present Russia with just such a set of adversaries if it really wished to. Accordingly, the odds of the entire continent falling under the Kremlin's sway—as well as the odds of Russia maintaining a new empire over the long term—seem low.

By contrast, the implications of a Chinese victory in the Indo-Pacific seem more systemically problematic. Such a victory would very likely lead not merely to the bankruptcy of existing U.S. alliance guarantees, resulting in the Americans' expulsion from the region—de facto, if not necessarily de jure (or at least not at first)—but also the creation of a Sinocentric imperium in East Asia. Nor would this new authoritarian Chinese regional order likely be particularly short lived. In contrast to the declining state of Russia, and despite some recent economic headwinds and the longer-term specter of demographic decline, China would not lack the manpower, military capabilities, or economic resources necessary to dominate its new network of tributary vassals. Between the two “theater-defeat” scenarios, therefore, from the perspective of the international order and the United States' future role therein, an Indo-Pacific loss is probably the more traumatic and irreversible.

Nevertheless, in saying that the United States should, in extremis, prioritize the Indo-Pacific theater, this paper is not suggesting that the United States should abandon efforts to protect its European allies in the Russia scenario. Prioritizing one thing need not mean euthanizing the other. Indeed, any failure to stand by NATO would likely have significant adverse consequences in the Indo-Pacific, whose leaders would be watching the war in Europe carefully as a window into their own ability to rely upon the United States when things become difficult. Just as the United States prioritized defending Europe from the Nazis in World War II without backing off in the war against Japan in the Pacific, even if the United States must now prioritize East Asia in certain ways, it should not abandon Europe.

WHAT COUNTS AS “WINNING”?

As the great power committed to maintaining the existing system of international order against revisionist challengers, and as the leading state in the two alliance systems challenged by opportunistic authoritarian aggression, the United States has a “theory of victory” requirement here of denying Russia and China the achievement of their own theories of victory. In Europe, for example, this means preserving Poland, Lithuania, and Ukraine as sovereign independent states, and as countries enjoying close security ties to the United States. In Asia, this means similarly preserving Taiwan's autonomy and keeping the United States' free democratic allies in Australia, Japan, South Korea, and the Philippines from having to become vassal states of the Middle Kingdom. As a status quo power facing revisionist aggression, the fundamental victory requirement for the United States here is thus simply that its *adversaries* do not “win.”

To be sure, a broader and more satisfying sort of U.S. victory would see the threat of revisionist aggression from Moscow and Beijing recede (or end?) more broadly, rather than having those powers simply “put back in their place,” thereafter remaining as wounded and aggrieved states looking for future vengeance. Indeed, given the nature of the two authoritarian regimes in question, it is possible that the clear military defeat of either one could shatter its brittle internal legitimacy narrative and lead to regime collapse.

That said, the United States should not assume that such regime collapse would end revisionist threats. After all, both polities have strong and vicious hyper-nationalist elements strongly committed to dark and semi-paranoid anti-Western discourse. Moreover, there is no guarantee

that either Vladimir Putin or Xi Jinping would be replaced by rulers any less committed to violent international self-aggrandizement. Nevertheless, even if further revisionism could not be precluded by the replacement of the current government, the very fact of a decisive defeat could help reinforce future deterrence messages, especially to the degree that this defeat “felt” more like a consequence of the regime having overreached by striking out abroad than like the fruits of a nefarious Western conspiracy to conquer or subvert the state.

To be sure, after a Western victory in either theater, it might be difficult to tell whether deterrence had truly been “restored,” for each regime might react to such a setback with a policy of tactical retrenchment—that is, effectively accepting only a temporary armistice in order to buy time in which to reprovise, reequip, and prepare to resume hostilities on better terms. Yet deterrence is always provisional and conditional, as it is contingent upon the deterring party’s success in maintaining concrete capabilities (and a perceived willingness to use them) sufficient to persuade a would-be aggressor, each and every day, that “today is not the day.” In this sense, the belligerent powers are not the only ones with agency here. Even a mere armistice would also give the United States and its allies a chance to be better prepared for a potential resumption of hostilities, and hence better able to deter the aggressors. In the face of revisionist moves against the geopolitical status quo, an approach that defeats the aggressor’s initial thrust, returns all players to the territorial status quo ante, and buys time in which the United States can further shore up its alliances and prepare to counter any further attacks looks more like victory than loss.

As suggested above, moreover, the aggressor’s prior defeat at U.S. hands might itself help to redress the longer-term deterrence problem rooted in adversary assumptions about Western sociopolitical weakness. Rather than being presumed to be a soft and fundamentally weak-willed adversary, the United States would thereafter be “the folks who thrashed you last time, even though you used nuclear weapons.” With a track record of martial success against twenty-first-century near-peer adversaries—and with no less capacity than before to actually use nuclear weapons against future aggression if this is needed—the United States would thus be better positioned to ensure future deterrence than it is now.⁷

Assuring Allies

QUESTIONS ABOUT U.S. CREDIBILITY

In general, there are two levels of U.S. credibility about which U.S. allies have reason to be concerned in this scenario, with the second being of more significance than the first. The first level is whether the United States would be willing to risk a direct clash with a great power adversary, in any form, were it to move against its allies. Here the allies ought to have little doubt about U.S. credibility, for in this scenario the United States not only did respond to aggression against its allies by throwing its conventional forces into the fray against the aggressors, but also responded effectively enough that it led to dramatic setbacks for the aggressors.

The second level of allied concern is whether U.S. nuclear extended deterrence will remain available in the event that an adversary uses nuclear weapons against it—that is, whether the

United States would be willing to use nuclear weapons in such a conflict if needed. This is a game-theoretical challenge dating back to the early years of the Cold War, which materialized once the Soviets acquired a strategic nuclear arsenal to counterpose against the U.S. one, and it raises a question to which no truly definitive answer has ever been given. In a context in which adversary nuclear weapons hold major U.S. cities at risk, to what degree would a U.S. president really be willing to “lose New York to save Hamburg”? On this level, the present scenario confronts the United States with a clear challenge: how much risk of nuclear escalation against the U.S. homeland should the United States be willing to accept in responding to an aggressor’s use of nuclear weapons against its forces and allies in theaters thousands of miles away?

This is a challenging question to which no a priori answer is likely possible, as much would depend upon the specific battlefield circumstances, the geopolitical and political contexts, and the personalities of the leaders in question. To judge from U.S. deterrence policy over many decades, however, the answer to the question is “definitely some.” Nonetheless, U.S. intestinal fortitude in this regard is presumably not infinite. The United States was clearly willing to accept considerable risk of escalation to a full-scale nuclear exchange in order to deter Soviet aggression against its allies in Europe during the Cold War. Yet the United States also seems to have recognized that there was an inherent degree of non-credibility in a promise, in effect, to destroy the world in order to “save” (for instance) Hamburg from the Red Army.

In response to this problem, the United States and its allies developed three answers that went beyond relying exclusively upon potentially homeland-imperiling U.S. strategic brinkmanship: (a) the British and French invested in their own nuclear weapons programs; (b) the United States adopted a “nuclear-sharing” policy under which it would provide nuclear gravity bombs for delivery by key NATO allies in time of war (while preserving U.S. control of such devices in peacetime); and (c) the United States deployed a variety of theater- and shorter-range nuclear delivery systems that would give it more options to respond to aggression without the stark choice between surrender and jumping all the way up the escalation ladder to a strategic exchange. Together, these choices added considerable operational flexibility to the collective NATO nuclear tool kit, enhancing deterrence without making nuclear use so casually thinkable that the United States would be tempted to engage in it absent the gravest of provocations.

Today, by contrast, only the first of the United States’ three Cold War-era responses (British and French weapons) really remains viable, though even then in a form considerably attenuated since Cold War days and not optimized for theater-type engagements of this sort in any event. The second response (NATO’s nuclear-sharing policy) has been allowed to atrophy into a fairly noncredible operational capability that would be difficult to employ in a full-scale conflict, is vulnerable to both nuclear and conventional preemption, and which (at least until sizeable numbers of dual-capable F-35 aircraft come online) would have difficulty surviving and ensuring mission-completion against serious air defenses.

As for the third response, the United States no longer has any effective U.S. nuclear assets designed for, devoted to, and deployed for theater-level nuclear missions. It does have a low-yield option in the form of the W76-2 warhead, but that device rides on a strategic delivery system, the Trident

D5 submarine-launched ballistic missile. The United States has no flexible, theater-range nuclear systems to array against the considerable Russian and Chinese arsenals of diverse and flexible theater-range systems. This makes it harder to reassure our allies that we really would be there (in a nuclear sense) for their “Hamburg”—as well as harder to convince (and hence deter) the would-be aggressor.

This is the basic challenge of the second-level question of nuclear use. It is surely possible for nuclear weapons to be too “usable,” and overquick resort to such tools could be catastrophic. Yet it is also possible for nuclear weapons use to be too hard to contemplate, for to find it truly “unthinkable” would be to invite aggression that cannot be deterred or combatted by purely conventional means. Deterrence policy is thus about finding the “Goldilocks point”—or, more elegantly, the Aristotelean Mean—between these bad answers. In the present scenario, however, the United States would surely be more able both to deter and to respond to aggression if it had more theater-range options.

Now that nuclear weapons have been used in this scenario, this second-level question of nuclear use moves to the forefront. Fortunately, the facts of the scenario so far do not quite precipitate the most challenging dilemma, so it matters less that the United States lacks the more flexible theater-range nuclear options it needs.

Presumably, U.S. allies have no special interest in the United States using nuclear weapons *per se*: their interest lies in being defended against aggression by whatever means are necessary—not *excluding* nuclear weaponry, but not necessarily *employing* it either. Indeed, at various points over the years, some allies have expressed concern that the United States might perhaps be too quick to use such weapons, particularly where such employment in theater would occur on their soil. (Over NATO’s history, U.S. defense planners have struggled incessantly with simultaneous European demands that the United States (a) be entirely ready to wage a nuclear war on their behalf and (b) not be too eager to do so, especially not in Europe. The equilibrium point between these demands is not always easily found.) Most likely, however, U.S. allies’ primary concern here is quite singular. Their fear is only that the United States might fail to use nuclear weapons in circumstances in which there is no way to protect the allies’ own existential security interests other than by using nuclear weapons.

Through this lens, a critical question is whether this scenario is “one of *those* cases.” And in this regard, the scenario could be said not yet to present such a need. So far, the conventional situation does not seem to be one in which vital U.S. or allied interests are threatened in ways that would require U.S. nuclear use. On the contrary, the United States and its allies seem to be prevailing without it. The primary, existential question from the perspective of allied second-level (nuclear) assurance, therefore, has arguably thus not yet been raised. After all, it would presumably do little harm to the United States’ reputation among its allies as an extended deterrence protector—and might even enhance its reputation for responsible nuclear statesmanship—if Washington were to decline to use nuclear weapons where *it did not need to use them*.

Instead, the remaining question here is whether a U.S. or allied nuclear response might be needed to the Russian or Chinese nuclear attacks simply because they were nuclear attacks. To this question, under these facts, reasonable people may disagree. Some might argue in the affirmative—claiming, in effect, that we “need” to use nuclear weapons to protect the credibility, to ally and aggressor alike, of the “nuclear” aspect of extended deterrence even when the United States does not need to use nuclear weapons for any actual operational military purpose in a war it is already winning.

This paper, however, contends that on the current facts of this scenario, the United States does not yet need to use nuclear weaponry. The extended deterrence the United States provides to its allies has never been an exclusively nuclear insurance policy against aggression. Instead, it has been an *inclusively* nuclear one. It combines all elements of available military power that are required to deter aggression and to defeat it should deterrence fail. That is, the United States has promised to defend its allies by whatever means are necessary, but it has not promised to use any *specific* form of military power *unless* that form is necessary. This is not some U.S. analogue to the mindless automaticity of the old Soviet (and now Russian) “Dead Hand” nuclear launch system. Rather, it is an ironclad promise to the United States’ best friends of *effective defense*—not of U.S. nuclear use *per se* and no matter what.

In this author’s view, a fundamental allied loss of trust in the credibility of the U.S. alliance guarantee would therefore probably not arise unless and until either (a) battlefield circumstances changed in ways that presented an ally with the prospect of catastrophic defeat absent U.S. nuclear use, and the United States did not then use nuclear weapons, or (b) the United States reacted to Sino-Russian nuclear use by retreat or some other measure of capitulation. Otherwise, remaining unintimidated and continuing to prosecute a successful conventional campaign—“fighting through” the adversary’s nuclear use in theater, as it were—should represent an optimal answer from the perspective of U.S. allies.

In this scenario, at least, it is possible that some allies would wish the United States to use nuclear weapons against Russia and/or China, while others surely would prefer that we did not. On the whole, however, it would likely be less costly to alliance solidarity for the United States to continue to win the conventional conflict fighting alongside its allies without using nuclear weapons than it would for the United States to use such weapons (especially on European soil) when it was not absolutely clear it needed to do so.

ALLIED SECURITY CONCERNS

The security concerns of U.S. allies in this scenario are fourfold, deriving from their situations as relatively militarily weak states close to a powerful revisionist great-power predator that is eager to carve out a more expansive sphere of influence or empire for itself in the world. First and most fundamentally, U.S. allies’ security concern is an existential one: they must avoid the loss of their autonomy and independence as sovereign peoples. Beyond this, and deriving from this core concern, U.S. allies have a second security interest in avoiding the loss of their ties to other countries able and willing to assist them in meeting such primary security needs. Most of all, this

means preserving military ties to the United States, but it also entails preserving their more general ability to leverage bilateral relationships or collective security institutions to meet security needs.

A third allied security concern is more prosaic, but still significant. Each ally has a security interest in keeping the military forces of its local great-power predator as far from its own borders as possible. Moreover, irrespective of immediate border threats, allies have a security interest in limiting that predator's deployment of long-range fires, aviation assets, naval power-projection capabilities, and other military tools capable of threatening that ally's forces, facilities, or critical infrastructure from afar.

More indirectly, U.S. allies have a fourth security interest in avoiding deep entanglement in economic, natural resource-centered, technological, supply chain, financial, or other relationships of dependency with either of the two great-power predators involved in this scenario. Such relationships may, or may not, provide immediate benefits (e.g., inexpensive goods, cheap energy, or corporate profits), but such ties are strategically debilitating and inimical to maintaining the sovereign independence that is each ally's first-order existential concern. Such relationships give leverage over that ally by allowing the other power to administer rewards and punishments in ways that reduce the ally's autonomy, undermine its ability to maintain a credible deterrent against aggression, and weaken relationships with third parties that are important to preserving its core security interests. (The existence of such relationships also likely contributes to adversary assumptions underlying the deep sociopolitical failure of deterrence discussed earlier: a country mired in structural dependency upon an aggressor will probably be assumed less likely to fight it.)

SIGNALING RESOLVE

Once deterrence has failed—or more challengingly, failed doubly, as in this scenario where both aggression and nuclear weapons use have occurred—the United States will likely have passed the point at which policy pronouncements and deterrence-related consultations with its allies can, alone, signal sufficient resolve. At this point, what counts most are U.S. actions and how adversaries understand them.

In this respect, perhaps the most important signal the United States could send is to not slow or alter its activities against aggressor forces in the two theaters, except when such steps may be needed to preserve ongoing operations in a potentially nuclear environment. To this end, all relevant U.S. (and NATO) conventional assets should be readied to operate in a radiological-nuclear combat environment as quickly as possible, with ground assets dispersing to widely scattered field dispositions and air assets moving to dispersal airfields. This could also include the issuance of detection and protective gear, medical countermeasures, and relevant decontamination equipment, as well as surging radiation-hazard first responder units and medical personnel forward.

Dispersing conventional capabilities—not merely land and naval units near the zone of operations but also aircraft from vulnerable bases to a wider variety of auxiliary dispersed locations, including those dual-capable aircraft (DCA) that would be needed for nuclear attack missions (i.e., unilateral U.S. assets in East Asia and NATO nuclear-sharing aircraft in Europe)—would also demonstrate resolve, unity, and collective preparedness. U.S. nuclear weapon storage vaults at

relevant European airfields should also be readied for potential operations, and any existing plans for weapon dispersal to additional airfields that do not involve actual DCA attack assets should be implemented. (Care should be taken, however, not to fly NATO DCAs en masse to weapon storage airfields or to fly DCA from such airfields, lest Russia mistake this for an attack in progress.) Every effort should be made to keep these precautions from slowing the pace of combat operations against the Russian forces, which should not stop, though some impact might be unavoidable. (The scenario gives us notably little detail about the operational implications of the Russian and Chinese nuclear strikes.)

The signals sent by these efforts are intended, together, to demonstrate in concrete form that (i) NATO will not give up in the face of nuclear provocations and (ii) NATO is quite prepared for the possibility of escalation. Beyond the theaters in question, moreover, U.S. and allied leaders in both Europe and the Indo-Pacific should make clear their intention to isolate the aggressors' economies as completely as possible from the global economy (e.g., impeding Chinese oil shipments through the Indian Ocean and the Strait of Malacca, and ending all Russian resource exports) for the duration of their wars of aggression. This may help create additional incentives for moderation.

The alert level of U.S. strategic nuclear forces would also need to be elevated, with vulnerable bomber assets dispersing to auxiliary airfields, and with portions of the force perhaps even beginning rotating in-air readiness patrols (though not flying on headings that could be mistaken for attack trajectories either toward Russia or toward China). U.S. intercontinental ballistic missiles (ICBMs) would remain on ready-to-launch alert, with logistics support crews immediately providing extra supplies of diesel fuel to ICBM bases and individual silos to prepare them to sustain alert operations during a potentially prolonged crisis in which reliance upon local peacetime power grids might be precluded by sabotage or cyberattack.

Meanwhile, serviceable in-port nuclear-powered ballistic missile submarines (SSBNs)—not only in the United States but also in Britain and France—should muster their crews and put to sea as quickly as possible. Emergency notice should also be given to operators of critical infrastructure facilities in the United States, Europe, and East Asia, encouraging or directing them to implement whatever protective protocols they might have to defend against Russian and/or Chinese cyberattacks, and to move to insulate their systems as much as possible from the internet (even at financial cost or loss in operational efficiency) and prepare themselves to implement emergency service restoration or reconstitution plans.

THE CRITICAL IMPORTANCE OF MESSAGE

While these preparatory steps are important in their own right, they are also critical to the U.S. messaging strategy. To understand the importance of getting U.S. strategic signaling right, it should be remembered that the Russian and Chinese nuclear attacks in this scenario were notably limited. They hit only things in theater that were of tactical operational relevance, for instance, striking only a very small number of targets despite both adversaries possessing a huge numerical advantage in theater delivery systems. Moreover, they refrained from hitting anything in the U.S. homeland or that was of arguable strategic importance to the United States. This suggests that U.S. adversaries are themselves carefully considering escalation risks, and that they do fear provoking a large-scale

nuclear response. If they understand that their nuclear use has not intimidated the United States and that the United States is indeed comfortable with escalation despite their previous assumptions to the contrary—but that, at the same time, U.S. war aims are limited, being confined only to restoring the status quo ante—the United States may have a chance to restore deterrence.

Accordingly, these concrete military moves would be accompanied by full-spectrum public messaging—including by the president directly—making three key points:

1. First, the United States would make clear that these nuclear-preparatory steps are indeed underway and that Washington is demonstrating in concrete ways the United States' ironclad commitment to protecting the sovereignty and independence of its military allies by whatever means necessary.
2. Second, the United States would make equally clear that under the current circumstances, U.S. nuclear weapons use is not yet necessary. U.S. messaging would stress that, while Russia and China's nuclear use was the result of tactical desperation as their wars of aggression began to falter, the United States itself faces no such desperate circumstances. On the contrary, despite the United States' strong preference to avoid using nuclear weapons and its willingness to use them if its adversaries force it to, the United States is currently prevailing in the conventional fight and intends to continue with that winning approach for so long as its adversaries' fixation upon aggression makes it necessary to resist them in order to protect the security and independence of free sovereign peoples.⁸ Washington would also make clear that it remains entirely prepared and ready to use nuclear weapons itself if Russia or China leave it no choice, and the United States would warn them not to test its resolve by using nuclear weapons a second time.
3. Third, the United States would make explicit that its war aims in this conventional fight are quite limited. The United States do not seek to inflict a "strategic loss" or regime change upon either Russia or China, but rather merely stop their wars of aggression. If they stop that aggression, the United States would have no more need to fight them.

TREATY VERSUS NON-TREATY PARTNERS

Much of this above-mentioned activity would be aimed primarily at protecting and reassuring U.S. military allies, as they would undoubtedly be the United States' highest priority. Moves that would reassure those treaty allies would likely have some impact in reassuring non-treaty partners as well, but this would be merely a secondary, rather than primary, benefit.

Military Response Options

U.S. MILITARY OPTIONS

The foregoing pages have already made clear the optimal immediate U.S. military responses to the current scenario: the United States should continue winning the conventional fight without employing nuclear weapons itself, while posturing itself to be ready for nuclear use if adversary nuclear threats or other military circumstances require. The United States would retain the option to do more, of course, and—depending how things develop—might well indeed still need to do so

in the face of further Russian or Chinese provocations (e.g., massive U.S. battlefield reverses or a second instance of adversary nuclear use). Absent such further need, however, discretion should remain the better part of valor.

WHAT IF THEY USE NUCLEAR WEAPONS AGAIN?

In the event that U.S. adversaries chose to use nuclear weapons a *second* time, the United States—as it will have signaled that it was ready to do—should be prepared to cross the nuclear threshold itself. At least initially, the key would be to find a type and level of U.S. nuclear response appropriate to the delicate task of (a) signaling undiminished resolve and of (b) not jumping so much further up the proverbial escalation ladder that things spiral out of control.

In this regard, one possibility would be to have a deployed SSBN in the Atlantic and one in the Pacific launch Trident missiles with reduced-yield W76-2 nuclear warheads toward two targets. (If the United States had the capability to do this, and reasonable confidence that its adversaries could see and understand that this is what the United States was doing, these weapons should also be launched on depressed ballistic trajectories clearly incapable of hitting strategic targets deep in the adversaries' homelands.) These four targets, two in Russia and two in China, would be chosen on the basis of being military locations consistent with legitimate targeting under the law of armed conflict (LOAC), and the destruction of which would have a real impact upon adversary military operations in each theater, but without inflicting massive civilian casualties and without directly posing what could be seen as an existential threat to either ruling regime. Choosing these targets would need to be done relatively quickly, and carefully, but there would be at least some time for careful selection, informed not only by military analysis but also careful assessment of adversary leadership psychology and domestic political dynamics.

The point in these attacks would be affirmatively to cross the “nuclear threshold,” including by hitting targets in the adversaries' homelands—not merely to raise the ante somewhat for purposes of coercive bargaining, but also because, as Willie Sutton might have put it, that is where the targets are,⁹ as well as because the United States would prefer not to set off nuclear weapons on its allies' territory if it can avoid it—while yet doing so in ways that adversary observers would be less likely to mistake for any sort of strategic attack and that signaled U.S. continuing commitment to a great degree of restraint.¹⁰ The U.S. president should also announce these launches publicly, making clear that this is a carefully limited theater action responding directly to these adversaries' nuclear use and demonstrating that the United States will neither yield to their intimidation nor be provoked into overreaction, and that U.S. commitment to protecting its military allies remains undimmed. (Afterward, moreover, U.S. officials would publicly present the rationale for choosing those targets and that means of attack, also making clear how this decision was consistent with longstanding LOAC principles of necessity, proportionality, distinction, and humanity.)

THE RISKS

This has already been covered, or at least implied, in the paragraphs above. The primary risk lies in the danger that the United States fails to find the optimal Goldilocks point between the extremes as it tries to simultaneously (a) persuade allies and adversaries alike of U.S. seriousness and martial resolution and (b) not signal so much readiness or eagerness for escalation that the adversary

feels provoked into catastrophic preemptive moves. Secondary risks also exist, among them the possibility either that some ally “opts out” of the conflict for fear of escalatory consequences, or that it “opts in” with too much enthusiasm by unilaterally taking steps that end up provoking adversary escalation rather than deterring it.

THE LOAC

The United States has long made clear its belief that the LOAC does apply to the use of all forms of weaponry in wartime, including nuclear weapons. Washington has also made clear in recent years its intention to abide by those rules in the event of conflict, even nuclear conflict. Despite U.S. commitment to such legal constraints, however, LOAC principles—if properly understood as U.S. officials have indeed carefully outlined them, and as generations of operational lawyers in the U.S. armed services have been trained on them—should not be a significant impediment to sound U.S. or allied strategy in this scenario.

There is no question that the use of nuclear weapons is not illegal under the LOAC when the very existence of a state is threatened—this being a formulation that the International Court of Justice (ICJ) accepted in its 1996 advisory opinion on the topic—and the present scenario of aggressor use of nuclear weapons against Poland and the Philippines would certainly seem to raise such concerns. Nor would the LOAC rule out U.S. or other allied nuclear use in defending an ally from such attack as a matter of course, as the right of self-defense recognized by Article 51 of the United Nations Charter does not preclude collective self-defense. The law would not permit simply *any* nuclear response, of course. Nevertheless, under such quasi-existential circumstances the logic of compelling “military necessity” should permit judicious nuclear counter-strikes—both to prevent allied defeat in a growing conventional conflict and to dissuade further (and potentially full-scale) nuclear escalation by the aggressor—even if such strikes entailed considerable civilian casualties.

LOAC principles are thus unlikely to be an obstacle to a careful and prudent response to the current scenario, even if that response turned out to involve U.S. or allied use of nuclear weaponry. The LOAC would preclude using a U.S. nuclear weapon directly to target Russian or Chinese civilians, of course, and U.S. and allied commanders would need to take feasible precautions to limit civilian damage (e.g., being as precise in their targeting as is feasible under the circumstances and using weapons of yield no greater than needed to accomplish the military objective). Yet it is hard to imagine military circumstances in this scenario giving rise to any need to do more than what a clear-eyed analysis of necessity and proportionality would permit.

Non-Kinetic Response Options

To the degree that non-kinetic options might exist that could affect the ability of Russian or Chinese forces to operate effectively in the specific theater wars described in this scenario, such activity might well contribute usefully to prosecution of the conflict below the level of U.S. or allied nuclear escalation. This might include, for instance: pursuing cyber or electronic warfare (EW) degradation of air defense activity or battlefield command, control, and communications (C3) networks; jamming or spoofing of adversary positioning, navigation, and timing (PNT) communications for engaged combatants; launching cyberattacks on infrastructure or transportation capabilities

that directly contribute to the fight in theater; or jamming or otherwise engaging space assets in connection specifically with their support to theater operations. If means were available to degrade adversary nuclear C3, but only in the context of theater operations such as the two nuclear attacks that already occurred, this would likely also be a useful contribution to the fight, helping make further regional strikes more difficult.

At least initially, however, care should be taken to avoid non-kinetic measures that might be interpreted as having existential implications. This could include, for instance, attacks upon Russian or Chinese space assets that support strategically critical functions such as national nuclear C3, cyberattacks upon critical infrastructure not associated with the specific military theater of operations, or perhaps even—given the paranoid and potentially fragile nature of the regimes in question—the dramatic stepping up of Information Operations (IO) or public diplomacy messaging that could be interpreted as encouraging regime change in Moscow and Beijing.

Conclusion

This scenario certainly presents challenging questions. For this author, however, the particular fact pattern of Russian and Chinese nuclear weapons use outlined in Project Atom 2024 does not have to drive the United States to nuclear use itself, at least not yet. The United States must continue to stand by its allies and ensure that they are defended against aggression, while denying the aggressors any advantage from their choice to cross the nuclear threshold. Nevertheless, since (and for so long as) the United States is winning both wars without using nuclear weaponry, it should continue to do so, while yet making it very clear that it is prepared to escalate to nuclear use—and indeed actually ensuring that it is thus prepared—if the aggressors leave the United States no choice. With the moderate war aims appropriate to a status quo power seeking to defeat aggression but not to remake the world in its image, the United States has the chance here to confound Sino-Russian aggression, rebuild a strong deterrent posture, prove to its allies that it indeed does stand with them when bullets start to fly, and demonstrate reassuringly temperate nuclear statesmanship, all at the same time.

Washington's Response to Nuclear Use against U.S. Allies

By Rebecca Davis Gibbons

Introduction

The circumstances of nuclear use described in the proposed 2027 scenario are unprecedented. The notional attacks would not only break an 82-year taboo concerning nuclear use in warfare, but nuclear weapons have never been used in conflict against other nuclear-armed states. These novel circumstances combined with the high stakes for all parties involved present U.S. policymakers with significant challenges in determining how to respond. Ideally, Washington would lead a course of action that would illustrate U.S. resolve and credibility to its allies and partners, avoid nuclear escalation, and demonstrate that nuclear use does not result in attackers achieving their strategic goals.

The analysis below argues that the primary U.S. objective, if the People's Republic of China (PRC) and the Russian Federation (RF) use nuclear weapons in the context of conflicts over Ukraine and Taiwan, is to manage and prevent escalation up to a major nuclear exchange. Secondary—though still vitally important—objectives include maintaining alliance relationships, ending the conflicts on favorable terms, and ensuring that the international community does not perceive nuclear use as benefitting the attackers. The United States and its allies should take several actions, militarily and diplomatically, to prevent these conflicts in the first place, and failing this, be ready

to address the first instance of nuclear use since World War II in a manner that does not lead to a broader nuclear war.

U.S. Strategic Objectives

The following section explores why deterrence failed and what the United States can do to prevent these deterrence failures, before presenting the U.S. strategic objectives in the scenario.

WHY DID DETERRENCE FAIL?

In the notional 2027 scenario, the initial failure of conventional deterrence is the most consequential failure. Both adversaries used nuclear weapons because they instigated imprudent conventional conflicts against U.S. allies and partners.

The purpose of nuclear use in both theaters appears to be twofold: (1) demonstrating the high stakes with which the adversaries view the conflicts and (2) terminating the war by deterring the United States and its allies from continuing to fight due to Western fears of additional nuclear attacks.

The best way to prevent these competitors from resorting to nuclear attacks is to ensure that a strong and credible U.S. deterrent posture—integrating nuclear and conventional capabilities—prevents both from initiating aggression against allies and partners in the first place. The United States and its allies could have taken several political and military steps to improve this posture prior to 2027 when the proposed nuclear attacks occur. A deterrence failure would likely result from an adversary questioning the U.S. political commitment to its allies and partners. It is thus helpful to review signals the United States has sent in recent years that were intended to strengthen credibility, but which may have been misinterpreted.

The U.S. government, in June of 2024, began to publicly signal its military plan to aid Taiwan’s defense. Admiral Samuel Paparo, head of U.S. Indo-Pacific Command, described the “Hellscape” strategy for defending Taiwan to a *Washington Post* columnist. Paparo explained that the “U.S. military would deploy thousands of unmanned submarines, unmanned surface ships and aerial drones to flood the area and give Taiwanese, U.S. and partner forces time to mount a full response.” He continued, “I want to turn the Taiwan Strait into an unmanned hellscape using a number of classified capabilities.”¹¹ International media sources reported on Paparo’s remarks widely, serving a deterrent function for the United States.

Admiral Paparo, however, also warned that the U.S. industrial base would need to increase its production of drones and other capabilities to implement this plan. Along the same lines, in 2023, a retired U.S. general questioned whether the U.S. military would be ready to defend Taiwan.¹² This skeptical public rhetoric and an inability to attain necessary levels of readiness—something the Chinese government would surely learn from intelligence gathering—could contribute to deterrence failure by creating doubt about both U.S. resolve and U.S. military readiness for such an operation.

Politically, there are reasons for the PRC to doubt the United States’ commitment to defending Taiwan due to the U.S. policy of strategic ambiguity. The United States terminated its Mutual Defense Treaty with Taiwan (the Republic of China or ROC) in 1979 when it formally recognized

the PRC. Since then, U.S. relations with Taiwan have been based on the 1979 Taiwan Relations Act. The act obligates the United States to provide Taiwan “with defense articles and defense services” to allow the island “to maintain a sufficient self-defense capability” and “to maintain the capacity of the United States to resist any resort to force or other forms of coercion that would jeopardize the security, or the social or economic system, of the people on Taiwan.”¹³ The act created a policy of strategic ambiguity regarding U.S. defense of Taiwan. Despite this policy, President Biden has spoken strongly of U.S. support for Taiwan’s defense on four separate occasions.¹⁴ Following these statements, White House officials emphasized that U.S. policy regarding Taiwan remained the same, presumably to avoid raising tensions with China.¹⁵ Making a “mistake” about U.S. support for Taiwan four different times likely has sent a strong signal of U.S. intentions to the PRC. It will be important to see how the next president speaks about Taiwan, as their words will send important messages to Chinese leadership about the U.S. defense of Taiwan. It is worth noting, however, regardless of presidential rhetoric, that as long as the policy of strategic ambiguity is in place, there is room for Chinese leaders to question the U.S. commitment to assisting Taiwan’s defense.

Beyond uncertainty regarding Washington’s military and political pledges to Taiwan, any Chinese attacks on Taiwan could stem from an assumption by President Xi that the stakes are higher for the PRC than for the United States. With Taiwan just over eighty miles from mainland China and the PRC increasingly asserting its dominance in the East and South China Seas, it is unsurprising that Chinese leaders would assume that the island of Taiwan matters more to Beijing than to Washington. The assumption that the United States and its Pacific allies have lower stakes in the region could lead Xi to calculate, first, that he could get away with annexing Taiwan by force, and second, that nuclear use could stop the United States from continuing to defend Taiwan in a crisis if the annexation does not go as planned.

Turning to the European theater, the deterrence failure dates to at least 2014, when the RF annexed Crimea.¹⁶ Based on the West’s limited response to that action, Putin determined that it was worth attempting to take the rest of Ukraine by force in 2022. He did not anticipate Ukraine’s ability to resist the invasion or the support Kyiv would receive from the West. As Ukraine was not a member of the alliance, NATO’s Article 5 commitment did not apply, but members of NATO responded to the attack with intelligence, supplies, and funding. The level of NATO unity surrounding Ukraine and the increases in defense spending among alliance members are intended to send a strong deterrent message to Putin regarding further aggression, but if Moscow were in a desperate gamble to split the alliance and to reduce the West’s support for Ukraine in a conventional conflict, then additional attacks could not be ruled out.

Finally, while preventing the conventional attacks in the first place is key to preventing the subsequent instances of nuclear use, this scenario does involve nuclear deterrence failures. The adversaries likely hoped that crossing the nuclear threshold would compel the United States and its allies to stop fighting. They may have doubts about whether the United States would employ nuclear weapons in regional conflicts.

WHAT CAN BE DONE TO AVOID THESE DETERRENCE FAILURES?

The U.S. military must prioritize the acquisitions required for the Hellscape plan and for follow-on military action in the region. In addition, the United States needs to find a way to sell Taiwan the military hardware required to defend itself from a PRC attack.¹⁷ If the United States does not provide what Taiwan needs in a timely fashion, it signals a lack of political resolve on the part of the United States and undermines Taiwanese military readiness. As (or if) the United States takes these steps to increase U.S. and Taiwanese readiness between 2024 and 2027, U.S. military leaders should project greater public confidence than they have to date about their ability to aid Taiwan's defense.

Short of altering the U.S. policy of "strategic ambiguity" regarding Taiwan's status, there are several ways the United States could message its resolve to maintain the status quo. First, more statements like those made by President Biden about his intention to defend Taiwan—even if they must be clarified after the fact—are better than saying nothing or being dismissive of the issue.

Second, top U.S. leaders should make clear to all audiences that the United States has long been a Pacific power and will continue to be one into the future. U.S. stakes in the region are significant: the United States has several allies and partners in the Pacific, maintains key military bases in the region, and benefits from the substantial percentage of global trade transported through the region's waters. The United States has demonstrated its commitment to the Pacific in recent years with AUKUS, the trilateral security pact with Australia and the United Kingdom, and the Quadrilateral Security Dialogue with Australia, India, and Japan. U.S. leaders should not concede that the PRC has more of a stake in the region, and particularly in Taiwan, than the United States.

Third, U.S. leaders should reiterate several talking points regarding Taiwan, both domestically and to the broader international community, to highlight why the United States seeks to maintain the status quo. One set of messages should emphasize what could occur if Taiwan loses its autonomy and becomes part of the PRC. Taiwan is a liberal democracy and a fundamental economic partner to the West. In particular, Taiwan is the world's foremost supplier of semiconductors and advanced semiconductors, which are necessary for cell phones, computers, cars, and military hardware. If Taiwan were to be swallowed up by its large communist neighbor, this vitally important industry would be under Chinese control. The United States could lose access to the advanced semiconductors necessary for its defense.

Another set of messages should address the PRC's unlawful claim to Taiwan. There is no history of the PRC controlling the island. The Taiwanese are a mix of indigenous and ethnic Chinese people, some of whom have lived on the island for centuries, well before the PRC existed as a nation-state. The PRC claiming that it has a right to this island is akin to modern colonialism. In sum, the United States and its allies must make clear that taking Taiwan by force is an illegal and illegitimate action.

There are also several steps the United States could take to strengthen its relationship with the Philippines and deter a potential attack on the island nation. The United States could do more to emphasize the importance of its partnership with the Philippines by assisting President Ferdinand R. Marcos Jr. with his domestic and international priorities, countering the Chinese disinformation

campaigns in the country,¹⁸ providing additional military assistance, and engaging in more joint military exercises in the region.

Moving to the European theater, the RF's initial attack on Ukraine in February 2022 appears to have been a strategic blunder as it created an enemy on its border, united NATO members against Russia, and caused many European nations to increase defense spending. If at some point in the future, the RF attacks Poland or another NATO member, then there must have been some change of circumstances that made Putin question NATO unity in the face of nuclear use on NATO soil. Alternately, a nuclear attack could be a desperate attempt to stop NATO from supporting Ukraine's defense.

Finally, Washington must signal its ability and willingness to employ nuclear weapons in these theaters, if necessary, to defend its allies. Signaling comes in a variety of forms, from guidance documents, presidential rhetoric, weapons movement, and exercises that employ these weapons. While the United States under the Biden administration has been wise to avoid the type of belligerent nuclear rhetoric coming from its Russian counterparts, future administrations can privately message their willingness to defend allies using all available options.

WHAT DOES WINNING LOOK LIKE?

The United States has several immediate and long-term strategic objectives in the proposed scenario. Before outlining those goals, it is worth emphasizing exactly what is at stake in this conflict. The PRC and RF crossing the nuclear threshold means that the world has come significantly closer to nuclear war, and with it, a nuclear exchange ending millions of lives, the loss of societies, and even the risk of human civilization on the planet. Any U.S. leader considering how to address this scenario must have that grave reality—however remote—in mind.

The primary objective in this scenario is to prevent nuclear escalation, whereby the United States and either the PRC, the RF, or both engage in escalating tit-for-tat nuclear attacks that result in a large-scale exchange of nuclear weapons. This is the primary goal because such nuclear exchanges would destroy societies, lead to millions of deaths, and cause widespread environmental devastation. Even if that outcome appears unlikely from the limited notional scenario, the circumstances are so unprecedented and the possibility of large-scale nuclear exchange so dire that avoiding large-scale nuclear escalation must be considered the goal that supersedes all others.

Secondary objectives include the following:

- Reestablishing the pre-conflict status quo with the PRC and Taiwan and returning Ukraine to its pre-2022 borders.
- Demonstrating U.S. credibility to its allies and partners. This is especially important in terms of nuclear nonproliferation goals. If allies no longer perceive Washington as a trusted security partner, they may consider developing their own indigenous nuclear weapons programs. For example, some leaders in the Republic of Korea (ROK) have called for the country to develop nuclear weapons, and a small number have done so in Japan as well. Polls of the ROK public have found that a majority supports an indigenous nuclear program.¹⁹

Polling of Eastern European publics also indicated support for indigenous nuclear programs in the weeks following the RF's 2022 attack on Ukraine.²⁰

- Maintaining the Philippines as an ally in the Pacific, to include the use of its military bases.
- Maintaining freedom of movement for all states within the Pacific Ocean.
- Reestablishing the taboo against first nuclear use.

The inability to achieve any of these important secondary goals means the loss of U.S. global leadership. U.S. allies and partners are key enablers in promoting favorable rules, norms, and institutions within the international system.²¹ The PRC and the RF, along with Belarus, Iran, and the Democratic People's Republic of Korea (DPRK), are increasingly forming a bloc determined to undermine U.S. global influence. If the U.S. response to this conflict were to cause the perception that the United States is not a dependable ally or partner, it would be a strategic win for the so-called Axis of Upheaval.²²

Assuring Allies

After the nuclear attacks on the territories of allies, other allies and partners will closely watch to see how Washington responds. U.S. leaders will need to address the immediate challenge of the attacks and the ongoing conflicts, while also considering how their actions affect alliance relationships in the immediate and longer term.

WHAT ARE THE RISKS—INCLUDING THEIR LIKELIHOOD AND CONSEQUENCES—OF ALLIES QUESTIONING U.S. CREDIBILITY IN THE EVENT OF STRATEGIC DETERRENCE FAILURE?

It is fair to assume that the publics and elites within allied nations will perceive the nuclear attacks by the PRC and RF as deterrence failures, but it is also important to note that both states used nuclear weapons in this notional scenario when they were *losing* conventional conflicts against the United States and its allies. Nuclear use stemmed from a place of adversary weakness and was meant to undermine U.S. resolve to keep fighting and to illustrate the high stakes of the conflict for the PRC and RF.

Given Putin's behavior over the past decade, it is possible, and perhaps even likely, that U.S. allies and partners will emphasize the RF's taboo-breaking decision to conduct a nuclear attack more than they will blame the United States for the deterrence failure. For example, Putin already has defied several international rules and norms when it comes to respecting national sovereignty, upholding sanctions against proliferating nations, and using chemical weapons against perceived enemies of the state. Moreover, his strategic mistake in invading Ukraine in 2022 and his administration's persistent nuclear saber-rattling since may result in NATO leaders questioning Putin's rationality. The theory of nuclear deterrence relies on leaders behaving rationally, so can the United States be blamed for not deterring an actor who may not be rational?

The PRC's nuclear use presents a different and perhaps more complex challenge. The Philippines is not under the protection of U.S. extended nuclear deterrence per the 1951 Mutual Defense Treaty,

and yet in a Pacific conflict, the nation would become a target as the United States operates out of its military bases. A potential nuclear attack on a Philippine military base would likely provoke public backlash toward the United States, especially among Filipinos aligned with the political faction of former president Rodrigo Duterte. Some Philippine leaders have already expressed concerns that U.S. military forces on their islands make them a potential target of a nuclear attack. Maintaining this partnership after an attack may be difficult without extending the U.S. nuclear umbrella.

HOW CAN THE UNITED STATES SIGNAL RESOLVE TO ALLIES IN THE EVENT OF STRATEGIC DETERRENCE FAILURE? WHAT WILL BE ALLIES' SECURITY CONCERNS IN THE EVENT OF STRATEGIC DETERRENCE FAILURE? WHAT ROLE MIGHT CERTAIN ALLIES AND PARTNERS PLAY IN A RESPONSE?

The most important means of signaling resolve is for the United States to continue prosecuting the respective conflicts and to respond to the nuclear attacks. Continuing the fight means that military forces may have to operate in spite of, and even in, radiation-contaminated environments.

In the hours after nuclear use, the focus in the White House will be learning as much as possible about the attacks and assessing its response. This will be a tense, high-stress period, but Washington will want to make allies aware of its plans. Ideally, NATO's Nuclear Planning Group would have discussed responses to RF or PRC nuclear use well before the beginning of this hypothetical conflict in 2027. The public response to the Russian attack should be presented as a NATO response.

A key aspect of demonstrating credible resolve is maintaining public support for U.S. responses to the attacks; reminding the U.S. public of the strategic importance of its alliances will be vital to this support. News of nuclear use on allies in the Indo-Pacific and Europe will shock the U.S. public; many could fear nuclear detonations would occur on U.S. territory. As a result, securing public support in the United States for military action in defense of allies and partners following the attacks may be challenging. NATO expanded in a period when most Americans no longer worried about European security or nuclear war; the public salience of the alliance and of U.S. alliance commitments is likely much lower than it was during the Cold War.

Before any potential conflict—and frankly, right now—the U.S. government, especially the president, should aim to better educate the public about the history of U.S. alliance relationships and their benefits. When it comes to most public discussions of U.S. allies today, there is too much talk about free-riding and too little about how U.S. economic, security, and political interests benefit from maintaining strong relations with its 30-plus treaty allies. Existing research from political science suggests that the U.S. public is more likely to support military action on behalf of formal allies than nonformal allies (such as Taiwan), so public education about Taiwan is also important.²³ Current scholarship also indicates that support for allies among the U.S. public is based on “elite cues,” so leaders need to be providing positive talking points about U.S. allies if they want to build public support for military action.²⁴

Following the use of nuclear weapons in this scenario, allies will have several concerns. Any countries targeted or immediately impacted by the nuclear use will need immediate assistance

addressing the medical emergencies caused by the nuclear detonation. Allies could also be fearful of follow-on attacks; they will expect the United States to respond strongly to protect them.²⁵

Allies and partners have a significant role to play in the messaging following nuclear use. They must unite in loudly and publicly condemning the nuclear attacks and should do so repeatedly. They should communicate that using nuclear weapons in these scenarios was unacceptable and neither nation will gain from using these weapons. These messages are key to reestablishing the nuclear taboo following nuclear use.

Military Response Options

The most challenging question facing the U.S. president after nuclear use by the PRC and the RF is how to respond to the nuclear attacks. The following section offers options for a military response that aligns with the strategic goals discussed in the section on U.S. strategic priorities.

WHAT WOULD BE THE PRESIDENT'S MILITARY OPTIONS IN THE EVENT OF STRATEGIC DETERRENCE FAILURE? WHICH OF THESE OPTIONS WOULD YOU RECOMMEND TO THE PRESIDENT?

Following the Chinese and Russian nuclear attacks, the president will hear many arguments that they must respond with nuclear weapons to signal strength and resolve. Some advisors will argue that responding without nuclear weapons will lead the adversaries to counter with another round of nuclear use. Others will warn that adversaries will perceive a nuclear response as escalatory and set the world on a dangerous path of nuclear exchange.

Recommendations for the U.S. response to this notional scenario are based on the following assumptions:

Assumption 1: Leaders may be unable to control nuclear escalation. Responding to the initial nuclear attacks with a U.S. or NATO nuclear attack makes it more likely that the United States will find itself engaging in tit-for-tat nuclear exchanges than if it does not initially respond with nuclear weapons. Once this contest of nerves begins, it could be exceedingly difficult to stop. Even if both sides do not want to escalate, in the fog of war, circumstances may add escalation pressures. For example, misinterpretations about the goals of adversary nuclear attacks (such as regime change or undermining command and control centers) could lead to escalation.

Alternatively, nuclear-armed states could face other types of accidents, mistakes, or misinterpretations that could lead to nuclear use. There are several historical examples of such mistakes. For instance, during the 1962 Cuban Missile Crisis, an errant U2 pilot, an accidentally inserted nuclear attack training tape, and even a black bear in Duluth, Minnesota, could have led to a nuclear war that neither side wanted.²⁶ Additionally, leaders below the commander in chief could conduct unauthorized attacks that could lead to further escalation.

Some may argue that the theater nuclear use is far from a strategic nuclear exchange and does not present a risk of all-out nuclear war. In this argument, there is a clear and meaningful line between theater (or tactical) nuclear weapons and strategic nuclear weapons. It assumes that

leaders could use tactical weapons but remain “below” the strategic threshold. There is little evidence to know whether this is true, and it could be a very costly and dangerous assumption to make. This argument of a clear demarcation between tactical and strategic weapons also has the unintended consequences of reifying three categories of weapons: conventional weapons, theater nuclear weapons, and strategic nuclear weapons. Whether intentional or not, this argument leads to the appearance that theater nuclear weapons are acceptable and thus more usable. And while smaller nuclear weapons do less damage, the damage is still significant and indicates a violation of a long-standing taboo. Furthermore, it is not clear if other leaders share the same assumption that there is a clear divide between employing theater and strategic weapons.

In sum, significant destruction could occur if both sides begin employing nuclear weapons. This is unprecedented territory, and no one can predict with certainty what will happen. The potential destruction caused by nuclear escalation poses too great of a risk to make the *ex ante* assumption that leaders can fully manage this risk.

Assumption 2: Military responses that lead to public humiliation of Putin and Xi are not likely to lead to preferred U.S. objectives. Considering the few checks on their decisionmaking,²⁷ their regional and global ambitions,²⁸ and their obsessions with legacy, it is worth considering how to minimize actions that serve to humiliate Xi and Putin. For this reason, the West should explore finding the right balance between responses that are conducted in the open and those that can be conducted with plausible deniability.

Assumption 3: To be deterred from further escalation, Xi and Putin must be fearful of follow-on actions. If the United States does not respond strongly to the nuclear attack, it will confirm that Xi and Putin were correct that the United States has lower stakes in both regions relative to the PRC and RF. The responses to the attack must be costly in terms of destruction of adversary capabilities—though not necessarily with nuclear weapons—and indicate that more attacks could follow.

Policy recommendation: Given the extreme danger of beginning a process of nuclear exchange with U.S. adversaries and the fact that the adversaries may use nuclear weapons again regardless of U.S. and allied action, it is prudent to retaliate with punishing nonnuclear responses that are both public and clandestine. The United States should conduct timely and precise conventional attacks on adversary military bases or installations to degrade their military capabilities. Targeting should not include command and control capabilities, which could be perceived as escalatory. Moreover, these attacks should be reported to the public. This strong conventional response signals both that nuclear use will be punished and that the United States does not need to resort to nuclear use to do considerable damage to the adversary’s military capabilities. At the same time, the U.S. should signal its readiness to conduct limited nuclear operations, if necessary, by moving dual-capable aircraft and submarines to the regions.

The United States should accompany these conventional attacks with clear assurances both in public and private that the United States does not seek regime change in the PRC or the RF. While in general the United States would prefer fewer authoritarian governments, in this conflict scenario,

making adversaries believe their lives and governments are at risk could lead to further nuclear escalation. As prospect theory informs us, those in the domain of losses—as China and Russia would be in this scenario—are willing to take great risks. The United States simply seeks a reversion to the pre-conflict status quo. If either foreign leader assesses that regime change is a goal of the West, the conflict could quickly escalate.

In addition to these conventional attacks, the United States should consider clandestine operations employing special forces teams that would degrade adversary military capabilities. These attacks do not need to be as immediate as the conventional attacks, but they should surprise the adversaries in terms of the damage done. If there are novel capabilities not employed by the West previously, this would be a suitable time to use them. The goal of these nonpublic attacks is to degrade enemy capabilities and demonstrate U.S. capabilities to adversary leadership with the plausible deniability of secret operations. PRC and RF leaders will not be forced to discuss these attacks in public and thus the potential humiliation or backlash that could come from these attacks is less likely. In other words, these operations should do serious damage while allowing Putin and Xi to save face. Once these actions have taken place, the United States should offer off-ramps to the RF and the PRC, while also making clear that the United States will continue fighting and may have to resort to nuclear use.

WHAT ARE THE RISKS ASSOCIATED WITH A MILITARY RESPONSE?

The most significant immediate risk is nuclear escalation. Other risks include the PRC and RF retaliating against the U.S. homeland and allies by other means, including conventional, cyber, or space attacks. The risks of not responding, however, include a loss of U.S. credibility, a breakdown in the U.S. alliance system, and a further weakening of the rules-based global order. Moreover, perceptions of “successful” use of nuclear weapons could increase proliferation pressures around the world.²⁹

Non-Kinetic Response Options

In addition to military responses to nuclear use, there are several other means by which the United States and its allies can pursue the primary and secondary strategic goals discussed previously.

The president, with allies, should take non-kinetic actions against the RF and PRC to punish the use of nuclear weapons and demonstrate the costly repercussions of nuclear use. These actions should be taken along with the military responses described above. Potential non-kinetic responses include the following:

Financial punishments: The United States could utilize the tools of the global financial system to hurt the PRC and RF economies. These tools may have limited utility in 2027, however, as both countries have worked to limit, to the extent possible, their economic vulnerabilities. Additional use of these tools may be necessary, but they will further the decoupling of adversaries from the global economic system led by the United States.

Cyberattacks: The United States should consider conducting cyberattacks on the adversaries that are initially limited and measured, but which signal the possibility of pursuing attacks with greater

effect if the conflict continues. This action does risk a dangerous escalation of cyber conflict—also unprecedented to date—so these actions must be calibrated very carefully. Attacks should avoid military command and control capabilities or otherwise blinding the adversary in such a way that they misinterpret the attacks as being the prelude to a larger attack.

Diplomatic statements: In the days and weeks following the nuclear attacks, U.S. and allied leaders should make strong statements to all audiences—foreign and domestic—about how the PRC and RF have broken a long-standing taboo in international relations. In addition, Washington should work with allies and all other like-minded states to write and publicize a unified statement of condemnation from leaders around the world (with as diverse a geographic grouping as possible). In addition, a UN General Assembly resolution, such as the one following Russia’s attack on Ukraine in 2022, would help send the message that the international community disapproves of the nuclear use.³⁰ These condemnations may not affect RF and PRC actions in the immediate term, but the lack of global condemnation following the first nuclear use since World War II would undermine the nuclear taboo moving forward.

In making public statements about the nuclear attacks, the United States and its allies must consider how other members of the international community will perceive nuclear use—namely, was it successful for the attackers? The most important message to convey will be that nuclear attacks do not allow states to succeed in territorial aggrandizement. The existing global nuclear order has dealt with many challenges to date, and this nuclear use would be a grave one, but there are indications that the order would be able to survive this challenge.³¹

It is worth emphasizing here that improving U.S. and allied relations with states within the Global South before this notional conflict in 2027 is paramount. Though the international community broadly supported the 2022 UN General Assembly resolution condemning Russia’s attack on Ukraine, there have been fewer governments that have unilaterally condemned the attack or Russia’s nuclear saber-rattling, even among members of the Treaty on the Prohibition of Nuclear Weapons, a treaty that explicitly bans nuclear threats.³²

Conclusion

The notional 2027 scenario discussed in this paper would pose significant challenges to U.S. leadership in the immediate and longer term. At best, the 82-year-old nuclear taboo is broken but further nuclear escalation is prevented. The United States is able to end both conflicts on favorable terms that punish the adversary’s militaries for nuclear use. Taiwan remains an autonomous democracy with a strong economy. Allies and partners remain committed to their security arrangements with the United States. Competition between the United States and both powers continues, but the PRC and RF are chastened. The message is clear that the use of nuclear weapons is not a means of achieving geopolitical goals, and the norm against their use is maintained.

The worst outcome is almost too horrible to imagine but must be contemplated: large nuclear exchanges that devastate massive swaths of nations on all sides of the conflict.

Somewhere in the middle of these extremes, a large nuclear conflict is averted, but the use of nuclear weapons and the resulting fear of being targeted make allies and partners reconsider whether they want to be in a defensive alliance. In a world with fewer allies and partners, Washington would lose a great deal of influence to shape the norms and institutions that make up the global order. This outcome likely would hasten the end of any remaining notion of a U.S.-led global order.

Because so much is at stake, the most significant takeaway from this analysis is the importance of trying to deter such conflict in the first place. As described above, there are several ways in which the United States can improve readiness and signal its resolve. Once nuclear weapons are used in war, one cannot predict how conflict will escalate. Because nuclear weapons present an existential threat to humanity, there is nothing more important than avoiding nuclear war.

Presidential Prudence and Responding to Strategic Deterrence Failure

By Ankit Panda

U.S. presidents, their advisers, and military planners must take seriously the possibility of limited nuclear use by adversaries in a range of plausible future contingencies. Resorting to the first use of nuclear weapons may appear attractive to U.S. adversaries as a means of seeking undeniable military and political advantage while simultaneously communicating exceptional resolve, risk acceptance, and stakes. In this way, the detonation of one—or multiple—nuclear weapons with deliberately lower yields on strictly military targets in the course of a conventional war or an intense crisis could compel the president of the United States, in their capacity as commander-in-chief, to weigh several risky response options, none of which may be particularly optimal across the full set of U.S. national objectives as articulated in peacetime.

As Thomas Schelling observed in 1961, reflecting contemporaneously on the Berlin crisis (1958-1961), intense crises between nuclear-armed adversaries are usefully conceived of as games of competitive risk-taking, where the military effects of nuclear use may be a secondary consideration to the resolve conveyed. “We should plan for a war of nerve, of demonstration, and of bargaining, not of tactical target destruction,” Schelling observed. He added that should the United States resort to the use of nuclear weapons against Soviet military targets over Berlin, “destroying the target is incidental to the message the detonation conveys to the Soviet leadership.”³³ For Schelling, prevailing in the crisis over Berlin would require “impress[ing] the Soviet leadership with the risk

of general war—a war that may occur whether we or they intend it or not.” Limited nuclear use—or limited nuclear war—thus was an option meant specifically to communicate to the Soviet Union that the United States would be willing to tolerate exceptionally high risks to achieve the political ends it sought at the time. Today, military planners contemplating limited nuclear use may believe that target choice is more than an incidental matter; however, impressing on the adversary the prospect of an uncontrollable lurch toward Armageddon will remain central to such a choice. Adversaries need not be irrational or deliberately seeking nuclear escalation to contemplate such actions; all it may take for limited nuclear use to be attractive is that adversary leaders see that step as being less bad than the alternatives, which may include conventional defeat.

Schelling’s prescriptions, written in 1961, may appear somewhat uncontroversial to U.S. audiences familiar with the history of the Cold War and U.S. interests in central Europe in the 1960s. Yet it is not inconceivable that should Russia, China, or North Korea choose in the twenty-first century to rationally resort to limited, nuclear first-use, their calculations will rest on a similar logic. Just as a U.S. president might have resorted to a nuclear detonation to convey a greater stake in the fate of Berlin to the Soviet leadership in 1961, so too might Russian president Vladimir Putin, Chinese leader Xi Jinping, or North Korean leader Kim Jong Un seek to “impress” on a U.S. president that running a risk of a general—possibly spasmodic—nuclear war over nuclear strikes on military targets is simply a risk not worth running. This logic underscoring the potential appeal of limited nuclear use is essentially deductive. To be sure, any nuclear use by U.S. adversaries would represent a world-altering event and the unambiguous manifestation of what U.S. deterrence planners consider “strategic deterrence failure,” but there remains a meaningful difference between successful war termination between nuclear-armed adversaries following limited nuclear use and war termination after a large-scale nuclear exchange. This difference may, quite literally, be measured in the millions-of-human-lives lost.

The Project Atom study asks its authors to consider a particularly sobering scenario of limited nuclear use. U.S. adversaries—specifically, Russia and China—escalate to limited nuclear use in order to compel the United States to back away from continuing military action. In the scenario assigned to the authors, both Russia and China resort to nuclear first-use, paired with signals designed to convey their willingness to run greater risks than the United States. In the scenario, both Beijing and Moscow reference each other’s military actions, including the other’s nuclear strikes, and a strong collusive logic appears to drive each adversary’s willingness to run risks. While such a scenario may not cohere to how subject matter experts versed in the decisionmaking and bureaucratic idiosyncrasies of the Russian and Chinese political systems might conceive of pathways to limited nuclear use by those states, it represents something close to a worst-case scenario for strategic deterrence failure manifesting in near-simultaneous nuclear use by two near-peer U.S. adversaries in different theaters. Notably, the scenario also features a resort to nuclear use by both adversaries following exceptional U.S. and allied conventional successes: in Europe, the United States’ NATO allies successfully seize a substantial portion of Russia’s Kaliningrad Oblast and, in the Indo-Pacific, the United States successfully interdicts an amphibious invasion force destined for Taiwan.

Given the problem described above and the prescribed scenario, this paper answers the query posed by the Project Atom study—namely, how the United States should respond to limited nuclear use—by centering the role of the U.S. president in nuclear decisionmaking. U.S. presidents, despite their limited briefings on U.S. nuclear capabilities and policies in peacetime, are unlikely to reason about matters of intra-war deterrence, escalation control, and war termination in a real crisis in the same manner that nuclear strategists writing about these matters in peacetime from their comfortable perches at research institutes might.³⁴ Put simply, presidents are likely to be inordinately fearful of general nuclear war in the aftermath of limited nuclear use and averse to the possibility of even a single nuclear warhead detonating on U.S. territory. This may be the case even if presidential advisers and intelligence assessments do not necessarily ascribe a high probability to further nuclear escalation in the prescribed scenario. Given that the president is solely imbued with the authority to issue valid and legal orders to release nuclear weapons, any analysis of *likely* and *plausible* U.S. response options must center how current and future presidents may weigh response options. Despite however many options are in place or requirements provided in peacetime, a U.S. president cannot be compelled by their military advisers to seek any particular course of action in a given crisis. Given this, this paper largely argues that should Russia and China resort to partially collusive, deliberate, limited nuclear use in simultaneous crises, as specified in the Project Atom scenario, most plausible U.S. presidents—individuals who are overwhelmingly likely to be politicians, unversed in the finer points of nuclear strategy—will likely be compelled to stand down instead of engaging in competitive nuclear risk-taking. These men and women, whoever they may be, are overwhelmingly likely to find themselves worrying about the prospect of general nuclear war—or the “final failure”—as John F. Kennedy once did at the height of the Cuban Missile Crisis.³⁵

If this is true, there is little doubt that several self-professed U.S. national objectives as articulated in peacetime would come under substantial stress, with potentially far-reaching consequences for U.S. grand strategy and foreign policy. This is ultimately the cost of strategic deterrence failure and why the United States must take the prospect of averting *any* nuclear use *anywhere* seriously. Other scenarios, including those featuring opportunistic limited nuclear use by one peer, may lead a president to accept greater risks, but this is outside of the scope of this study. As this essay will discuss, prudent planning for such failure can ensure that a U.S. president that may choose to avoid running the risk of nuclear escalation remains able to seek a world after strategic deterrence failure that is somewhat favorable for the United States. This can also be a world where the consequences of having resorted to limited nuclear use do not entail strategic victory for Russia and China, but rather a narrow, costly, pyrrhic victory.

Fundamental Questions for the United States

In reasoning about possible responses to strategic deterrence failure manifesting in limited nuclear use, U.S. leaders, advisers, and planners must be clear about the key national objectives and their relative levels of priority. In the event of strategic deterrence failure, the chief U.S. objective should be to ensure the avoidance of a general, unlimited nuclear war that could lead to fundamentally unacceptable levels of damage against the U.S. homeland as a result of adversary counterforce or countervalue strikes. Democratically elected U.S. presidents, charged by voters with defending

the homeland, are likely to consider *any* nuclear attacks on U.S. territory as tantamount to unacceptable damage. Despite the somewhat methodical Cold War origins of this terminology, in the context of the given scenario, presidents are unlikely to be persuaded by their military advisers that the United States can ride out limited nuclear strikes and continue to exist as it did precrisis. This consideration presents an obvious and uncomfortable source of friction with U.S. assurances to allies as delivered in peacetime, a matter to which we will return later in this essay.

Avoiding general kinetic damage against the homeland in the course of an ongoing war should thus be a key consideration for the president and should be prioritized above all other considerations, including, in the context of the scenario, supporting Taiwanese and Ukrainian objectives, supporting NATO and East Asian allies, and generally preserving the international order. These goals will remain operative but are fundamentally secondary to the survival and protection of the U.S. homeland. Because strategic deterrence failure of any magnitude is likely to be a world-altering event, it is quite likely that the precise circumstances of initial adversary nuclear use should cause a reassessment of key U.S. objectives. While the prescriptions that follow will make for unsettling reading in allied capitals, they should not be taken as a recommendation for the United States to exit the business of extended deterrence altogether. There are several plausible limited nuclear use scenarios that do not feature collusion as outlined in the Project Atom scenario where U.S. presidents may be substantially more willing to run risks in the defense of allies, but the scenario at hand here presents a particularly devilish predicament: the possibility of follow-on collusion by Moscow and Beijing in a general nuclear war against the United States.

That said, strategic deterrence failure should not paralyze the United States in its ability to respond entirely. While restoring the territorial status quo ex ante in both Europe and the Indo-Pacific in the given scenario may not be possible at acceptable levels of cost to the United States, Washington should nevertheless seek to dissuade and deter further adversary nuclear use and terminate conflict on terms that would be deemed acceptable, if not entirely favorable. Critically, following strategic deterrence failure, U.S. adversaries will be correct in their assessment that their stakes—over Ukraine and Taiwan, respectively—are greater than those of the United States given the objectives articulated above.³⁶ This is especially likely to be the case if Putin and Xi resorted to nuclear use out of desperation to preserve their political control and out of a belief that maintaining their territorial integrity requires running the risk of a nuclear exchange over these territories. *Even if* U.S. grand strategy and decades of investment in a global order that seeks to proscribe aggressive territorial revisionism may be at risk, many presidents may nevertheless opt for prudence in averting escalation.

While the president's advisers might point out that Russia and China, like the United States, would also be fearful of a general nuclear war—undoubtedly correctly—and that the U.S. nuclear force is survivable to the point of assuring their destruction should escalation prove uncontrollable, prudent presidential leadership would still have to consider the stepwise process of escalation after a U.S. nuclear response. As a result, the prioritization of the survival of the United States as a key national objective is likely to prompt such a prudent president to abstain from responses that could heighten the probability of a general nuclear war.

Nevertheless, the president should be ready to employ the full array of tools from across the diplomacy-information-military-economics (DIME) spectrum to achieve the above-stated U.S. objectives as well as possible. Many of these steps can be planned for and conceived of well outside the immediate confines of a crisis, including the crises specified in the Project Atom scenario.

Preventing adversary nuclear use and strategic deterrence failure will rest on manifesting in the mind of adversarial leaders the prospect of intolerable costs should they proceed, while simultaneously conveying that nuclear use is unlikely to confer tactical or strategic benefit. For both Putin and Xi, the most substantial cost likely relates to their personal political control over their respective states. While the United States should not unambiguously indicate that any nuclear use would lead to an end of their regimes, its declaratory signaling should maintain calculated ambiguity while conveying that catastrophic costs would ensue. While deterrence should prioritize a willingness to hold at risk what adversaries value most, threatening the personal political control or broader regime security of nuclear-armed great power adversaries is unlikely to advance U.S. interests—either in the scenario at hand or in general terms. Issuing such signals, by contrast, is likely to powerfully disabuse adversaries of any deliberate restraint that may still seem valuable after their limited nuclear use, rendering the prospect of follow-on uncontrollable escalation far more likely. In essence, such signaling by the United States would have the effect of further heightening the stakes for adversarial leaders to essentially existential levels concerning their personal political control. Successful war termination for the United States following limited nuclear use will require forbearance on such messaging. A practical problem for the United States, however, will be its noisy domestic political environment, where prominent political figures, including lawmakers from the president’s own party and the opposition, will likely issue calls for regime change or at least the removal of these leaders. U.S. adversaries will likely be unable to disentangle this “noise” from the “signal” of deliberate presidential messaging and assurances.

At higher levels of escalation—particularly, follow-on strikes initiated by Russia and China—U.S. messaging could adopt the position that general nuclear war is a real possibility and would mean the effective end of Putin’s and Xi’s political control. The United States should simultaneously seek to maintain a robust set of flexible and responsive conventional capabilities, including capabilities forward-deployed to both Europe and the Indo-Pacific. It should also seek to enable its allies and partners in the regions to proffer similar capabilities while ensuring integrated military planning and operations with these allies. Critically, U.S. messaging in the course of a crisis prior to strategic deterrence failure should be *contingent*: emphasizing that consequences will befall adversaries should they choose to transgress the nuclear threshold, but that, by contrast, those same consequences *will not* befall adversaries should they choose to abstain from nuclear employment.

U.S. Strategic Objectives

It is useful to reflect on the factors inherent in the scenario that appear to precipitate a resort by both Russia and China to limited nuclear use. In the scenario, the most critical cause of strategic deterrence failure appears to be the result of two factors. First, leaders in both Russia and China, fearing conventional defeat and having experienced substantial conventional setbacks, are likely

primed to reach into their nuclear holsters. Successful conventional denial, in other words, prompts these leaders to view nuclear weapons as a useful offset—for tactical, strategic, and psychological reasons. Second, both Putin and Xi appear to believe—probably correctly—that nuclear use will powerfully convey both their resolve and the substantial asymmetry in stakes that exists for them versus the United States.

They may further believe that despite professed U.S. diplomatic and other assurances to allies in peacetime, a U.S. president in wartime may be deterred from employing disproportionate force, including through the use of nuclear weapons, if necessary, due to the prospect of uncontrollable escalation. Within the confines of the scenario, deterrence failure may have been averted through protracted conventional warfighting, even if this would entail substantial costs to the armed forces of the United States and its allies. Swift conventional success by the United States and its allies appears to have been a powerful motivator for both Russia and China to reach for their nuclear holsters. Deterrence failure in the scenario in no small part appears to be intertwined with both Putin and Xi fundamentally miscalculating the odds of conventional victory.

In both the Indo-Pacific and Europe, the United States' core objectives prior to strategic deterrence failure are to deter significant escalation, to preserve the territorial status quo, to reassure its allies, and to preserve the international norm against territorial conquest. Following strategic deterrence failure, no objective should be greater for the U.S. president than ensuring that the survival of the country is not threatened by the prospect of uncontrollable escalation into a general nuclear war.

Victory for the United States within the presented scenario is far from straightforward despite the formidable conventional successes of allied forces in Europe and U.S. forces in the Indo-Pacific. A president and their expert advisers may disagree on the precise contours of victory in a crisis like the one envisaged in the scenario—just as President Kennedy and many of the key ExComm members (with the exception of George Ball) disagreed about the advisability of the Jupiter deal in the final days of the Cuban Missile Crisis. After strategic deterrence failure, a president may be rendered exceptionally sober by the prospect of general nuclear war—what Kennedy called the “final failure”—and be willing to take exceptional steps to seek prompt war termination, even on terms that would have been nominally unacceptable to that same president prior to adversary nuclear use.

On the contrary, should a president choose to accept the risk of further nuclear escalation and retaliate in kind—either with nuclear weapons or a massive conventional attack—victory could amount to a decision by the adversary to seek termination of the conflict to avoid further damage to their nations or their political control. Because this latter option is far more contingent and depends on variables that may be fundamentally unknowable in the midst of a crisis (such as Putin's and Xi's proximal risk acceptance), it bears substantially greater risks. Should the U.S. president seek to sue for war termination following adversary nuclear use, there likely would be severe, unprecedented, and—from the vantage point of peacetime—intolerable consequences to how the United States' capability to project power globally, to reassure allies at a distance, and to hold global leadership would be perceived. In such an event, the casualty would largely be the United States' extended deterrence guarantees; a U.S. president would have palpably demonstrated that they

are unwilling to run the risk of a nuclear war that could cause damage to the homeland to back its allies. But, in general, the United States would be able to maintain robust deterrence of adversaries for other scenarios, such as attacks on U.S. territory itself. The potentially fatal blow to the U.S. system of extended deterrence thus further underscores the severity of any strategic deterrence failure scenario involving limited nuclear use, but especially the collusive scenario articulated in Project Atom. As mentioned earlier, this analysis should not be taken as a repudiation of extended deterrence, but instead as an appraisal of the challenges to sustaining U.S. allied commitments in the aftermath of the precise limited nuclear use scenario at hand. Even if the course of action recommended here may heighten the probability of allied nuclear proliferation, this outcome—with its many uncertainties—may be preferable to inviting greater escalation by resorting to reciprocal nuclear attacks.

Assuring Allies

The risks of allies questioning U.S. credibility in the event of strategic deterrence failure are substantial and likely insurmountable in the context of the scenario provided if Washington pursues a course of action that prioritizes its own national survival and immunity from nuclear attack. Allied leaders and a U.S. president will likely have a divergent sense of risk acceptance following strategic deterrence failure. For the presidents of the Philippines and Poland, in particular, nuclear use on their territories will be seen as a cataclysmic deterrence failure verging on an existential threat. For the United States, that same assessment would not hold, but the possibility of further damage in a general nuclear war would likely cause any prudent U.S. president to weigh the trade-off in supporting allies and averting damage to the homeland.

There are likely conventional options that the president could adopt to inflict military costs on adversaries for nuclear use that would maintain an acceptable level of risk of follow-on nuclear escalation, but these may be insufficient for allied leaders and publics that could be motivated to see a U.S. nuclear response out of a desire for retributive damage against Russia and China. As a result, it is highly likely that following strategic deterrence failure, allied perceptions of the credibility of the United States would suffer drastically *unless* Washington opted for nuclear use in kind, which would present substantial risks and is unlikely to be preferable to the alternatives presented to most plausible presidents. As much as expert advisers to any president might profess support for U.S. alliances in peacetime, they might find that in the heart of a bona fide nuclear crisis, concerns about credibility are simply unpersuasive to a president concerned first and foremost with averting a pathway to nuclear war. This was precisely the predicament that arose in the final days of the Cuban Missile Crisis, when several ExComm members were opposed to Kennedy's willingness to contemplate an off-ramp by way of withdrawing U.S. intermediate-range missiles deployed to Turkey, a NATO ally.³⁷ Notably, adversary limited nuclear use against allies may be unlikely to prompt the same kind of national outrage and fervor that drove the United States to run risks in the aftermath of the Pearl Harbor (1941) and September 11 (2001) attacks on the homeland. The sole exception may be the Chinese strike specified in the scenario, which hits a U.S. naval base and presumably results in the deaths of thousands of U.S. servicemembers. This could encourage

a president to accept greater risks in responding to China, though likely still well under the nuclear threshold.

A president may further inquire how best to signal resolve to U.S. allies throughout the crisis. They may then be told that the most effective means of signaling resolve to allies would be to meet adversary nuclear use with some form of proportionate nuclear use. There are substantial risks to this, however. First, a proportionate response in the eyes of U.S. military planners may be interpreted as escalatory by the adversary and, therefore, potentially could prompt further escalation. Second, by employing nuclear weapons, the United States would concede substantial normative credibility that could be valuable in shaping global diplomatic narratives in a post-conflict environment (including with nonaligned states). The United States could aim to signal resolve to allies by inflicting calibrated, proportionate damage against adversary forces implicated in the nuclear strikes described in the scenario with its conventional forces. This is unlikely to sufficiently convey resolve as allies may not find a conventional response to nuclear use on their territory as satisfactory. While allies may not be uniform in this assessment of a conventional response, U.S. experts and officials, in consultations with allies, from East Asia to Europe, repeatedly contend with demands that nuclear use be met with nuclear retaliation.

Military Response Options

There are four basic categories of military response that could be considered in the course of the Project Atom scenario. First, a U.S. president could choose to forgo all military options and focus solely on war termination by diplomatic means. Second, a U.S. president could opt for a conventional response—either one designed to inflict tailored, proportionate damage, or one designed to disproportionately retaliate for nuclear use without employing nuclear weapons. Third, a U.S. president could opt for a nuclear response designed to inflict tailored, proportionate damage. Finally, a U.S. president could opt to seek escalation dominance and up the ante with significant nuclear use while communicating to the adversary U.S. resolve to escalate further should it be necessary to accomplish U.S. and allied objectives.

Of these options, the first and second will hold the greatest practical appeal for any prudent U.S. president, who is unlikely to be versed in the strategic rationales for an in-kind or escalatory nuclear response and more concerned with preserving the safety, integrity, and survival of the United States itself. The first option may be unappealing, however, due to it appearing tantamount to complete strategic defeat. (Presidents may consider their own political legacies in weighing responses too.) Following strategic deterrence failure, there is likely an extremely low probability that the United States can, at acceptable levels of risk to the homeland, optimize for all its core strategic objectives, including reassuring its allies. As a result, a prescription for the president could be two-fold. First, they should opt for a limited conventional strike against the nonstrategic and regional nuclear force units involved in the strikes against Poland and the Philippines. At the same time, the president should employ a diplomatic strategy that seeks to persuade these allies as to the inadvisability of a nuclear response, which could beget further nuclear use against their territories (including against nonmilitary targets or military targets more proximal to population centers).

While allies may be unpersuaded and motivated by a retributive logic demanding nuclear use, it is equally possible that internal fissures within allied governments and domestic political forces may support U.S. goals in persuading allies of the sufficiency of a conventional response. To deter further nuclear use by adversaries, the president should be willing to allude to intolerable and extreme consequences while underscoring to the broader world that the United States differentiates itself from Russia and China in viewing nuclear weapons as tools of last resort for truly extreme circumstances—not as a mere offset to the possibility of conventional defeat, as Moscow and Beijing have demonstrated in the scenario.

Critics may counter that Russia and China resorted to nuclear use precisely because of U.S. and allied conventional military successes—and so why should a conventional response deter further nuclear use? The answer to this question rests on the logic of nuclear use by both countries in the first place. If both leaders crossed the nuclear Rubicon out of a belief that a single instance of limited nuclear use would paralyze the United States into inaction, the willingness to continue conventional military operations would disabuse them of this notion. By “fighting through” nuclear use and continuing to inflict costs without relying on nuclear weapons, the United States would deny Moscow and Beijing the political benefits of their limited nuclear use. Should Russia and China seek to deprive the United States of this option, they may be forced to opt for additional nuclear strikes against U.S. and allied forces, significantly raising the prospects of a total war across two hemispheres alongside the prospect of general nuclear war with the United States. If Putin and Xi remain rational, they may see no benefit in upping the ante in this game of competitive risk-taking, and instead may seek to minimize their further losses while retaining political control.

The reason for not recommending that the president seek a tailored nuclear response or adopt an escalation dominance mindset and seek to escalate with nuclear weapons is because both options present substantial drawbacks and an unacceptable level of risk of a general nuclear war that would be most ruinous to the United States. Even assuming a small probability of escalation by the adversary should be sobering for a president given the consequences that could ensue. In the case of a tailored nuclear response option, U.S. adversaries may fail to be deterred if they continue to believe that their stakes in resolving their short-term territorial conquests are greater than those of the United States. Putin and Xi would, in their own minds, likely be willing to believe this—especially if they see the stakes in the crises as having now grown to encompass their own political survivals and legacies. If this is the case, a tailored, proportionate U.S. nuclear response, even if correctly interpreted as proportionate by U.S. adversaries, may beget further adversary nuclear use. Neither Putin nor Xi may choose to escalate in the types of targets they choose to hold at risk—keeping retaliation confined to military targets—but could continue strikes on NATO and Philippine territory by focusing on military targets. The collusive logic that is at play in the scenario could also influence this decisionmaking as both Moscow and Beijing may understand that their continued choice to participate in a game of competitive nuclear risk-taking will force the United States to contend with the challenge of waging a general nuclear war simultaneously against both powers. Hewing to the damage-limiting principles that have guided U.S. nuclear strategy for decades simultaneously against Russia and China would be largely unfeasible, even if survivable U.S. systems could inflict massive damage in punishment against both aggressors. A collusive all-out nuclear attack by Russia

and China against the United States with their surviving forces would still result in the practical end of U.S. civilization and society.

An escalation dominance approach, meanwhile, would succeed in conveying U.S. resolve and likely persuade Xi and Putin that their assumptions about U.S. stakes in these conflicts may be incorrect. However, a substantial use of nuclear weapons by the United States against military targets in Russia and China runs a serious risk of generating concerns in both states about the possibility of their forces remaining intact and about the viability of their regimes themselves. Without robust means of communication with the national or senior military leadership of both countries,³⁸ which cannot be taken for granted, the United States may be unable to assure Russia and China that its choice to opt for nuclear escalation was not the precursor to a massive, damage-limiting counterforce campaign or a broader war of regime change. Fear of either outcome will encourage both Putin and Xi to contemplate larger-scale nuclear use. Because U.S. and allied combined military posture in the Indo-Pacific and Europe will also consist in the scenario timeframe of precise, conventional munitions, adversaries will have to also account for the possibility of massive, supplemental, conventional counterforce strikes. This option, while appealing for what it might convey about U.S. credibility to adversaries and allies alike, generates the greatest possibility of massive adversary nuclear use, which would result in unacceptable damage to the U.S. homeland. It would not be advisable for a president to run these risks immediately; instead, they should seek to maximize U.S. goals through the nonnuclear means articulated above, at least initially.

There is a meaningful difference between the preceding two options in terms of how they might prompt reactions from Russia and China. Russia, which is known to incorporate a degree of counterforce targeting itself, may be more willing than China to run greater risks by attempting to destroy U.S. nuclear forces preemptively. In the 2028 timeframe specified in the Project Atom scenario, China's nuclear forces will remain quantitatively inferior to those of the United States, and Chinese leaders would likely be deterred by the prospect of assured U.S. retaliation. As a result, it is substantially more likely that, even if opting for escalation dominance, U.S.-China nuclear exchanges could take place across several steps before either side considers massive nuclear strikes against the other. Despite this, Chinese leaders may remain pathologically vulnerable to fears of a disarming U.S. counterforce strike; these fears could be compounded by 2028 with the deployment of additional missile defense and conventional long-range strike assets in the Indo-Pacific.

Regardless of U.S. objectives, it will be in the interest of the United States to have adversaries remain less concerned about the possibility of a massive, damage-limiting first strike than about limited retaliation (either nuclear or conventional). Additionally, the United States should endeavor to avoid feeding adversary expectations that it seeks to end their political control or regimes. The key to successful war termination will differ with regard to both Russia and China. For China and Xi, inflicting substantial enough damage to the People's Liberation Army's conventional and amphibious landing forces to render seizing and controlling Taiwan unfeasible will confer bargaining leverage. With Russia, the United States and NATO may try to use seized territory in Kaliningrad to sue for war termination with Putin. If either Putin or Xi begin to exhibit particular psychological pathologies indicating irrational risk acceptance (which cannot be ruled out), these

assumptions may not hold, and the United States may be forced to contemplate greater escalation than might otherwise be prudent. Given the impossibility of predicting irrational decisionmaking pathologies in a serious nuclear crisis, further elaboration on this point will not be provided, though it does bear consideration.

U.S. planners must also consider the law of armed conflict. Adversaries will expect a U.S. nuclear or conventional response to adhere to publicly stated prewar principles, which include an emphasis on counterforce targeting and compliance with the law of armed conflict. This *should* rule out adversary expectations of countervalue strikes (deliberate attacks against major urban population centers and other nonmilitary targets). However, this will likely also heighten adversary fears about a possible damage-limiting strike against their nuclear forces, command and control, and other enabling capabilities. While the United States will be unable to disabuse adversaries of its long-stated interests in damage limitation, to the extent possible, any U.S. nuclear or substantial kinetic response should be accompanied by assurances that it does not seek to destroy adversary nuclear forces or sever adversary national leadership from key military functions. To this end, a response should be accompanied by public and private messaging (if feasible) designed to indicate tailored punishment against military units implicated in the execution of nuclear strikes. There is no reason the United States should deliberately seek to eschew the law of armed conflict in navigating responses to the scenario at hand.

Non-Kinetic Response Options

The president would have a wide array of non-kinetic options available in the event of strategic deterrence failure. Choices would include broad diplomatic messaging to allies, partners, and the nonaligned world aimed at obtaining unconditional condemnation of Russia and China for resorting to the first use of nuclear weapons in war in more than 80 years. The president could simultaneously marshal U.S. diplomatic resources to seek a broad, international coalition condemning both countries. It is likely that certain nonaligned states or states more aligned with Russia and China would opt to blame the United States for Russian and Chinese nuclear use, citing well-trodden narratives built up over years by Moscow and Beijing about U.S. alliances, military posture, and other factors. The United States should be ready to actively counter this, including by declassifying intelligence as much as possible to demonstrate that nuclear use was a result of desperation for both Putin and Xi. Given the severity of the scenario and the implications for U.S. interests, the president should be willing to authorize broad declassification that would serve these ends, even at the cost of possibly compromising sensitive sources and methods.

Practically, the United States would likely also seek to enhance international economic sanctions, but the efficacy of these sanctions is likely to be limited; in anticipation of a decision to employ nuclear weapons, Putin and Xi would likely have expected such a response and have been undeterred by the prospect, as their limited nuclear use exhibits. Other non-kinetic options could include cyber operations against both Russia and China. These could be carried out for a range of objectives, including sowing a narrative within both countries that seeks to convey to the Russian and Chinese people the erratic character of their national leadership; seeking intelligence on

likely follow-on military action following deterrence failure; and, finally, undermining Russian and Chinese military operations. Out of caution, the president should ensure that U.S. offensive cyber operations, to the extent feasible, do not affect Russian or Chinese assertive political control over their own nuclear—or broader military—forces. In general, cyber operations, if detected, could prove escalatory. The president should be particularly cautious about authorizing operations aimed at penetrating sensitive systems related to strategic situational awareness or command and control, which could raise the fears in both states about non-kinetic interference in their nuclear forces either as an end in itself or as a precursor to broader counterforce strikes.

A chief purpose of U.S. non-kinetic efforts should be to maintain the normative higher ground, which will be valuable in a post-conflict environment with allies, partners, and nonaligned states alike. Even if allied governments view U.S. credibility as having taken a fatal hit following a decision to resort to a nonnuclear response, allied *publics* may be more readily persuaded by a U.S. choice to respond in a more limited fashion, particularly if Washington is able to make the case that opting for more escalatory responses would likely have resulted in nuclear strikes on their territories (and further nuclear strikes, in the case of Poland and the Philippines). For Russia and China, however, U.S. non-kinetic measures will largely be peripheral in shaping their cost-benefit calculations on further escalation.

Conclusion

It should be acknowledged that from the vantage point of peacetime in 2024, the above-stated analysis does not make for particularly encouraging reading. One does not need to have read this assessment of the scenario and U.S. response options to conclude that the strategic deterrence scenario presented likely portends “defeat” for the United States. However, this defeat should be construed narrowly: the United States likely fails to compel Russia and China away from seeking their territorial revisionist goals at substantial cost, but ultimately survives as a nation and polity to restore and seek influence in a post-conflict world. Writing about potential nuclear crises demands an abundance of imagination, and U.S. policymakers and planners should be clear-eyed about the possibilities that would remain for the country in a post-strategic deterrence failure world.

The centrality of presidential decisionmaking about nuclear crises represents both a strength and a weakness in the analysis above. It is a strength because it contends with the often-heard dictum that military plans “never survive first contact with the enemy”—partly because reality is complex and inherently unpredictable, but also because the ineffable idiosyncrasies of presidential decisionmaking can only become known under the psychological and emotional stress of a real crisis. However, the choice to center the president and presidential guidance also represents an analytical limitation in reasoning about U.S. responses to limited nuclear use because it is inherently impossible to account for the various personalities that may one day be asked to reason about matters of nuclear war.

Finally, for U.S. allies, this scenario presents the crystallization of long-held anxieties about extended deterrence. Indeed, as much as U.S. policymakers may see peacetime assurance demands from allies as a leaky sieve, they are born of well-placed anxieties about extended deterrence failing

under extreme circumstances. Allied fears in this regard are not entirely misplaced and there are indeed scenarios, at the worst-case end of the spectrum, involving collusion by the United States' two great power, near-peer, nuclear-armed adversaries that will bend and possibly break assurances made in peacetime. The Project Atom scenario could be one such example. Analytically, however, this should not condemn extended deterrence to the status of a bluff. Instead, the United States and its allies should be ready to consult, plan, and game out various strategic deterrence failure scenarios to ensure that they can be averted in the first place. For instance, in the provided scenario, it appears that escalation to nuclear use by Russia in the European theater was driven by Polish and Lithuanian conventional operations into Kaliningrad without a central decision by NATO or broader consultations with the United States. Ensuring coordination and strategic synchronicity between the United States and its allies will be key to avoiding the worst in high-intensity conventional crises. Finally, beyond the working- and expert-level tracks, U.S. assurances must be supplemented by high-level political engagement with allies, underscoring in particular the special role of the president in U.S. nuclear decisionmaking.

Above all, this analysis should also underscore the essential importance of averting strategic deterrence failure in the first place. The hard choices U.S. nuclear-armed adversaries could force upon the United States by resorting to limited nuclear use are ones no president should be asked to consider.

Basis and Elements of a Strategy for Multiparty, Intra-War Nuclear Deterrence

By Melanie W. Sisson

Though much is known about nuclear explosions—their physics, their mechanics, their effects—very little is known about their use as weapons of war. History provides analysts a single war in which nuclear weapons were detonated, and a small number of occasions in which decisionmakers are known to have seriously contemplated their use. This record is thin gruel upon which to make compelling inferences, or from which to draw solid conclusions.

A paucity of empirical data, however, is not evidence that nuclear weapons cannot—or will never—be used again. Nor does it exempt civilian policymakers and military practitioners from the responsibility of preparing to make choices about nuclear employment.

Policymakers confronting a situation in which they find it necessary to consider whether, when, which, and how many nuclear weapons to use will have to answer questions that are at once philosophical and practical, moral and material, urgent and permanent. If they are of stable temperament and rational inclination, then policymakers will seek methodical ways with which to weigh the value of nuclear restraint against that of nuclear action. Such approaches will produce clarity in defining strategic objectives and war aims, intellectual empathy for the adversary's decision calculus, and creativity in the operational art of designing alternative military courses of action.

Scenario analysis is one method for comparing the advantages and disadvantages of alternative courses of action and, for strategists and planners, serves the same purpose as practice does for teams in any discipline: it doesn't make perfect, but it does make progress. Each phase of a scenario exercises the thought processes involved in aligning military operations with war aims, and war aims with strategic objectives, under conditions in which some variables that might affect the likelihood of success are foreseeable and controllable, and some are not. In this way, scenarios pull assumptions to the surface, inspect their implications, and then test courses of action for consistency of logic, fidelity to principle, and resiliency to changes in condition.

Scenario analyses, however, are abstractions of reality accompanied by storytelling—theory, reasoning, and argumentation.³⁹ This is especially true for nuclear scenarios. There is, therefore, special risk in attending too much to a scenario's mechanics and not enough to the concepts and commitments it calls into question. If nuclear war does move from being a possibility to being a reality, whatever the specifics, there is no evading the fact that what policymakers will be deciding is which and how many humans will not survive, or if any will survive at all.

Analytic Assumptions

The strategy developed here is premised on analysis of a two-theater, two-adversary, two intra-war nuclear launch scenario (referred to throughout as “the scenario”). Where information is not available—either because it does not exist or because it is not specified in the scenario—the strategy relies on a set of reasonable assumptions. Some assumptions are about the dynamics of nuclear war, because there hasn't been one from which to draw historical evidence. Some are about decisionmaking in the United States, about which relatively much is known in general, but nothing at all in the context of a two-theater war that involves nuclear use. Other assumptions are made about the scenario's adversaries, because little information about their respective decisionmaking processes is available in the scenario itself.

There is no standard definition of what elevates nuclear use from being limited nuclear war to being general—“all-out”—nuclear war. In the 1960s, the U.S. government planned for its nuclear forces to be of a size and quality to be able to execute a retaliatory strike that would destroy “between 20 and 25 per cent of the enemy's civilian population and between 50 and 75 per cent of his industrial capacity.”⁴⁰ Applying this measure to the scenario means that general nuclear war would produce the immediate deaths of approximately 376-469 million people.⁴¹ A recent study by climate scientists calculates that if the belligerents in the scenario detonated sufficient warheads to achieve this mutual 25 percent casualty rate, then follow-on deaths from post-nuclear famine would reach approximately 2.5 billion people within two years.⁴²

In the absence of any less arbitrary threshold, this strategy defines the lower bound of general nuclear war as the detonation by any one state of the number of nuclear weapons needed to produce a total yield sufficient to kill 25 percent of a belligerent's population. Detonations that occur below that threshold constitute limited, not general, nuclear war. The strategy similarly assumes, based on the above, that general nuclear war in the scenario would destroy modern civilization and might even constitute a species-extinction event for much of biological life on earth, including

humans. It assumes that governments would cease to function, and that there would be no meaning attached to the idea of nationhood, as individuals and collectives would instead be left to struggle to survive. In other words, the strategy assumes that the costs of general nuclear war are so extremely negative that they far exceed any benefits derived from the defeat and unconditional surrender of the adversary.

The strategy also is built upon the recognition that there is no empirical basis upon which to make predictions about the dynamics of nuclear war.⁴³ Specifically, once nuclear exchange has begun, there is no fact-based reason to presume that the likelihood of de-escalation, or of controlled escalation, is greater than the likelihood of unrestrained escalation.⁴⁴ The strategy therefore assumes that all nuclear detonations have an unknown probability of creating an escalatory spiral, regardless of variation in their specific features—for example their type, location, yield, casualty rate, and so forth. Even relaxing this assumption and allowing the likelihood of escalation to general nuclear war to be low instead of unknown does not change the basic inequality. The magnitude of the costs of general nuclear war are so great that even very small probability estimates produce very large negative results—ones so destructive that they dwarf any possible positive results of victory.

U.S. Strategic Objectives

The strategy presented here assumes that U.S. policymakers are rational actors. This means they are sensitive to the costs, benefits, and probabilities of various courses of action and base their choice of action on estimates of expected value: the net positive or negative effect on U.S. interests produced by the outcome of each course of action, multiplied by that outcome's probability of occurring.⁴⁵ The strategy also assumes that U.S. decisionmakers assess that the extreme costs of general nuclear war exceed any potential benefits derived from the adversary's total destruction, and that they are aware that the detonation of any nuclear weapon has the potential to result in an escalatory cycle that ultimately produces general nuclear war.⁴⁶

Within the set of nonnuclear outcomes, the strategy assumes that policymakers consider the benefits of conventional victory to be greater than those of a negotiated settlement, and that both are greater than the benefits of total defeat. It also assumes policymakers judge the value of maximalist victory—the unconditional surrender of the adversary—and of a negotiated settlement to be greater than the costs of conventional war because, in the absence of this assumption, the incentive would be for the United States to withdraw.

The expected values produced by these combinations of probabilities, costs, and benefits mean that U.S. policymakers will prefer all nonnuclear outcomes to all nuclear outcomes (Table 1).

In the absence of information to the contrary, this strategy assumes that the scenario's adversarial decisionmakers also are rational actors whose choices reflect their estimates of expected value. This assumption, however, does not require the adversaries to arrive at the same rank ordering of preferences over outcomes as the United States.

Table 1: Assumed U.S. Preferences over Outcomes

Rank order of U.S. preferences over outcomes (least to most preferred)
General nuclear war
Nuclear detonation on U.S. homeland
Nuclear detonation on U.S. ally
Nuclear detonation anywhere
Total defeat/adversary achieves maximalist war aims
Negotiated settlement
Total victory/United States achieves maximalist war aims

Source: Author's analysis.

In general, preference hierarchies can be classified as one of two types. Type-1 actors estimate that the costs of general nuclear war exceed any benefits derived from the adversary's total destruction, whether by nuclear or conventional means. A Type-1 actor will therefore prefer all nonuse outcomes to all nuclear-use outcomes.

Type-2 actors do not consider the costs of general nuclear war to exceed any benefits derived from the adversary's total destruction, whether by nuclear or conventional means. A Type-2 actor can therefore prefer one or more nuclear-use outcomes to one or more nonuse outcomes. One possibility in the scenario, for example, is that one or both of the adversaries assesses that the expected value of general nuclear war is equal to or greater than the expected

value of a defeat that requires conceding their political objectives and surrendering (Table 2).

If either adversary is a Type-2 actor, and it concludes that the United States has maximalist war aims and estimates the probability of conventional loss to be high, then this preference ordering makes the Type-2 adversary more likely than a Type-1 adversary to initiate nuclear war, and very unlikely to exercise restraint in waging it. Other preference orderings are possible, though for all rank order profiles the key differentiator between adversary type is the relative value placed on nuclear-nonuse outcomes compared to nuclear-use outcomes.

This strategy makes assumptions about the United States, as outlined above, that define it as a Type-1 actor. This classification might be incorrect. Even if it is correct at conflict initiation, policymaker views might change once war is underway; so long as decisionmaking is driven by humans, the decisions they make will be vulnerable to variations caused by the full range of human biases, frailties, emotions, and impulses. Nonetheless, the United States is assumed here to be a firmly Type-1 actor because this assumption is consistent with the scenario's emphasis on seeking to deter, rather than to fight, nuclear war. The strategy does not make the same assumption about the adversaries and instead accepts the possibility that each might be either Type-1 or Type-2— not for lack of hope that they are the former and not the latter, but rather to account for the uncertainty that they are.

The assumed expected value calculations and resultant rank order establish preventing general nuclear war as the primary U.S. strategic objective. The secondary U.S. strategic objective is for there to be no additional nuclear detonation, of any type or yield, anywhere. This secondary objective is responsive to the horrific effects that all nuclear detonations have on humans, other

Table 2: Example Rank Ordering of Rational Type-2 Adversary Preferences over Conflict Outcomes

Example Type 2 actor scenario rank order of preferences (least to most preferred)

Total defeat/United States achieves maximalist war aims
General nuclear war
Nuclear detonation on homeland
Nuclear detonation anywhere
Negotiated settlement
Total victory/achieves maximalist war aims

Source: Author's analysis.

short of maximalism that they can accept. Seeking such an outcome requires implementing a U.S. warfighting strategy that uses diplomatic, economic, and military measures to communicate that the United States does not seek regime change or societal collapse. The strategy must also demonstrate nuclear restraint by not engaging in tit-for-tat nuclear actions, including posture, alert, or deployment changes.

Assuring Allies

U.S. political objectives need to be supported, and its warfighting operations aided, by local allies in both regions in the scenario. Alliance discipline in communicating limited war aims is essential; inconsistent and mixed messages will undermine the ability of the United States to credibly signal both nuclear restraint and its desire to reach a mutually acceptable, negotiated settlement.

As adversary confusion and the likelihood of misperception of U.S. intent increase, so does the likelihood of adversary nuclear use regionally and, ultimately, the likelihood of escalation to general nuclear war. The United States cannot impose signaling consistency upon its allies and partners, but they should regularly be reminded that mixed messages increase the risks of adversary nuclear use and escalation.

In the scenario, U.S. allies across and within the two theaters differ in their reasons for entering into conflict, in the type and extent of the material contributions they make, and in their respective war's immediate effects on their interests. Some allies might be dissatisfied with non-maximalist U.S. political objectives and wish to press for the adversaries to surrender on allied terms. The United States should attempt to address this objection by reinforcing that the purpose of limiting possible actions (e.g., nuclear use or nonuse) is to protect the alliances' shared interest in averting the least favorable conflict outcomes: concession to the adversaries' maximalist demands, or an

animal species, and their habitats, and to the risk that additional nuclear launches might escalate to general nuclear war.⁴⁷

In the scenario, the United States has joined wars in two theaters after adversarial attacks on allies and partners. U.S. political objectives and war aims in both regions are twofold: to demonstrate intolerance for wars of choice and to retain the sovereignty and autonomy of U.S. allies and partners. Because policymakers cannot eliminate the possibility that the adversaries are Type-2 actors, and because the primary U.S. strategic objective is to achieve a nonuse outcome, U.S. warfighting strategy must start from the premise that for all belligerents there is a set of possible, acceptable political outcomes

uncontrolled escalatory spiral that begins with nuclear detonations, perhaps on allied territories, and that ultimately leads to general nuclear war.

Allies might also take the view that the unwillingness of the United States to make nuclear threats or to use nuclear weapons on their behalf undermines long-standing U.S. policies of extended deterrence, and therefore increases their risk of being a victim of a nuclear strike. This misperceives key features of the post-detonation environment. In the first instance, the United States' nonuse strategic objectives render as equivalent the security interests of U.S. allies and of the United States itself—nonuse is definitionally an “extended” objective. In the second, an environment in which an adversary has used conventional and nuclear weapons to attack a U.S. ally is one in which U.S. extended nuclear deterrence—adversary inaction produced by the threat of nuclear consequence—has failed.

The possible reasons for detonating a U.S. nuclear weapon thereafter are three: to punish the adversary; as an element of a strategy to try to reassure allies by demonstrating that the United States will use nuclear weapons on their behalf; or as one element of a strategy aimed at deterring adversaries from additional nuclear use. Policymakers cannot be confident that the likelihood of producing these effects is greater than the likelihood of producing an escalatory spiral ending in general nuclear war. Because the primary U.S. objective of this strategy is to prevent general nuclear war, this risk of escalation means that the United States cannot use a nuclear weapon to punish the adversary, to try to assure allies, or to try to establish U.S. credibility and, on that basis, implement a new strategy of deterrence. This does not mean that the United States is not committed to its allies and their vital national security interests during the war. It does mean, however, that the United States' obligation to defend them is addressed by the ongoing conventional fight and the strategic U.S. objectives of preventing additional nuclear detonation and general nuclear war.

Military Response Options

Achieving a nuclear nonuse outcome is commonly discussed under the rubric of intra-war deterrence. In this scenario, deterrence is applicable because military defeat of the adversaries is not possible. No matter how powerful and effective U.S. diplomatic, political, economic, and military measures are, they cannot render the adversary (or adversaries) incapable of continuing to fight: their nuclear arsenals will remain available for use even under conditions of international isolation, economic collapse, and conventional military defeat.

Strategies of deterrence seek to alter adversary perceptions of the likelihood and magnitude of the benefits of an action in relation to the likelihood and magnitude of its costs. This assumes the actor is sensitive to costs, and that it has principles, people, objects, or assets that it values and prefers not to lose.

The logic of deterrence, however, does not capture the full set of possible motivations for an adversary's nonuse of nuclear weapons. An actor might choose to exercise nuclear restraint for one or some combination of at least seven reasons (Table 3).

Moral or ethical compunction and fear of technical failure can be considered if not impossible then at least highly unlikely to inhibit an actor from nuclear use in any conflict scenario in which that actor has already successfully detonated at least one nuclear weapon. In the scenario, it also is reasonable to assume that none of the belligerents is likely to assess that any one of them has the capability to mount a meaningfully protective defense against a concerted nuclear campaign. The United States therefore can seek to deter additional nuclear use through the threat of cost imposition—a strategy of conventional or nuclear deterrence—or it can seek to convince the adversaries to pursue a mutually acceptable, negotiated, political settlement.

In the scenario, U.S. adversaries first used conventional war to achieve political aims despite the threat of substantial resistance, continued to fight despite a decreasing likelihood of prevailing, then escalated horizontally by attacking a U.S. defense treaty ally, and finally escalated again vertically through the detonation of a nuclear weapon. The scenario does not contain sufficient information to make any analytically sound inferences about how or why the initial U.S. warfighting strategy failed to deter the adversaries from nuclear use. This strategy therefore interprets these behaviors as indicating that the scenario adversaries are highly cost tolerant, a characteristic that decreases the likelihood that strategies of deterrence through threats of cost-imposition will be effective.

The strategy assumes that in both theaters the initial U.S. conventional warfighting strategy was to impose conventional costs meaningful enough and substantial enough either to eliminate the adversary's ability to continue to fight conventionally or to convince it to sue for peace—that is, to deter it from carrying on fighting. The scenario describes the war as ongoing, meaning that the United States has been unable to destroy the adversary's conventional capabilities or to threaten the type and severity of costs that would convince it to abandon its war aims. Given that both adversaries detonated a nuclear weapon during the war, moreover, the conventional costs the United States imposed, and those it threatened, also were demonstrably not effective at deterring intra-war nuclear use.

It is possible that the United States would eventually identify and be able to threaten conventional costs that could hurt the adversary sufficiently in a way it didn't anticipate and thereby deter further nuclear use or persuade it to concede. Pursuing such a strategy of deterrence, however, is high in uncertainty and, therefore, also in risk. It is not possible to know prior to making the threat or imposing the consequence that it will have the desired effect. Each such attempt has some probability of resulting in escalation to further adversary nuclear use, and there is no way to know if that probability is high or low.⁴⁸ Even if the quality of intelligence assessments and other information about the disposition and preference of the adversaries is quite high, such information cannot eliminate uncertainty about the adversary's likely course of action.⁴⁹

The effects produced by the threat of nuclear cost imposition in a strategy of intra-war deterrence are similarly uncertain. This approach risks cultivating the adversaries' belief that they might be able to achieve their strategic or political objectives by engaging in nuclear brinkmanship and escalation.

Table 3: Possible Reasons for Adversary Nuclear Nonuse and its Applicability in the Near-Term, Two-Theater, Intra-War Nuclear Use Scenario

Possible Reason for Nuclear Restraint	Scenario Applicability
Moral, ethical, religious objections to the use of nuclear weapons	No
Lack of confidence in technical reliability of nuclear capabilities	No
Assesses the United States can defeat nuclear capabilities	No
Assesses the United States will retaliate with intolerable conventional costs	Yes
Assesses the United States will retaliate with intolerable and possibly existential nuclear costs	Yes
Assesses using nuclear weapons again will not help achieve political objectives or war aims	Yes
Assesses using non-kinetic or conventional means can achieve political objectives or war aims	Yes

Source: Author's analysis.

The risk of encouraging rather than deterring adversary nuclear use applies equally to threats to and attacks on the adversaries' nuclear infrastructure, via conventional kinetic or cyber weapons, including on units or sites from which a tactical nuclear strike has been launched. Such an action would not only run the risk of initiating an escalatory spiral, but the possible colocation of tactical with strategic nuclear weapons also means that strikes meant as limited retaliations might be misconstrued as strategic first strikes intended to deplete the adversary's second-strike capability.⁵⁰ In this scenario such a perception would therefore be expected to increase the likelihood that an adversary would launch a nuclear weapon, and perhaps execute a massive attack, possibly against nuclear assets or civilian targets in the U.S. homeland.⁵¹

U.S. warfighting aims in each region therefore will be limited and focal. In both regions, U.S. warfighting strategy should use conventional forces to try to prevent either adversary from advancing the current lines of contact as described in the scenario, but not to advance the line of contact itself. All kinetic and cyber actions should target only adversary military units and assets. Attacks on the adversaries' homelands should include only those military units and assets that have been directly engaged in conventional kinetic or confirmed cyber-warfighting activity, and all U.S. military actions should adhere to international humanitarian law. To the extent possible, the United States and allied forces should execute operational concepts that minimize the military utility of adversary tactical nuclear weapons.

If an adversary does detonate another nuclear weapon anywhere, then the U.S. intra-war deterrence strategy has failed, and the president will have to assess current conditions and decide

whether to continue to fight conventionally or to concede. The United States should not respond with its own use of a nuclear weapon in theater or elsewhere, given the possibility of escalation to general nuclear war. This is true even if the adversary launches one or more nuclear weapons against nuclear assets, industrial facilities, or civilian centers in the U.S. homeland. If the homeland strike is limited, the adversary still cannot be certain that the United States will not use its nuclear weapons in the future and therefore might still be deterred. The president would therefore, again, have to assess current conditions and decide whether to continue to fight conventionally or to concede. If the homeland strike exceeds the lower bound of general nuclear war (an explosive yield that kills 25 percent of the U.S. population), then the United States, insofar as it exists, destroys much but gains nothing by sending a salvo in return.

Non-Kinetic Response Options

This strategy assumes that diplomatic and economic instruments—e.g., severe reprimands, changes in standing and status in international institutions, the imposition of economic sanctions, and other restrictions on adversaries’ abilities to participate in the global economy and to access the international financial system—were imposed as part of the initial U.S. warfighting effort. Given that both adversaries detonated a nuclear weapon during the war, the non-kinetic costs the United States imposed and those it threatened were not effective at deterring intra-war nuclear use. Even if the United States did not immediately implement the full retinue of available measures, the adversaries’ initial nuclear detonations suggest that threatening to impose more such costs is likely to have little persuasive effect.

Non-kinetic responses should, nonetheless, continue to be elements of the ongoing U.S. warfighting strategy. They are useful insofar as they hinder the adversaries’ kinetic warfighting capacity, and the United States can use the possibility of relaxing these consequences in efforts to convince the adversaries that a mutually acceptable, negotiated, political settlement is possible.

War Termination on Favorable Terms

This strategy is based upon the rational calculation that, in this scenario, the overriding U.S. strategic objective must be to preserve a future in which humans can live in some form of society that permits more than the base struggle for near-term survival. It therefore confines the definition of war termination on favorable terms to those that govern the present moment, not those that might protect U.S. interests beyond it. There is no way to anticipate what U.S. interests after these wars will be, or what geopolitical structures might further them.

The temptation when formulating alternative strategies based on nuclear war scenarios like the one considered here is to recommend courses of action that include U.S. nuclear use on the basis that there is some chance that it will succeed in convincing the adversary to do what the United States wishes—to argue, that is, that it just might work. This is precisely the temptation that policymakers must resist. No attachment to any political ideology, nor any idea of nationhood, can justify knowingly endangering humankind. This must certainly be true for any political ideology or nation that purports to hold sacred the inalienable rights of all human beings. What could be more

contrary to this commitment than risking nuclear holocaust for entire societies of people who had no direct authorship in the policies of their governments?

The urge to destroy adversary governments in such a situation would no doubt be powerful, but it is intolerable under any circumstance to risk the extinction of the human species in order to do so. Nuclear decisionmaking cannot be driven by pride or vengeance, or by the fear that, if the worst comes and the United States perishes, then so too do the values and principles that produced it. Nuclear decisionmaking must instead be guided by the conviction that liberal thought will reemerge, and by the imperative of preserving a world in which that is possible.

If Deterrence Fails

Analyzing U.S. Options for Responding to Adversary Limited Nuclear Use

By Gregory Weaver

The decision to focus Project Atom 2024 on the issue of how the United States should respond to limited nuclear deterrence failure in a conflict with a peer nuclear adversary was both wise and timely. Wise because doing so helps address key gaps in U.S. strategy development. Timely because the rise of China as a second peer nuclear adversary, and the increasing strategic alignment of Russia and China, create a heightened risk of collaborative or opportunistic aggression in two theaters that requires the development of a strategy and associated enabling capabilities to address this problem.

Most nongovernmental analyses of the problem of war with a nuclear-armed adversary focus, understandably, on how to deter the initiation of such a conflict or on deterring nuclear escalation in such a conflict. Successful deterrence avoids the much uglier problem of what to do if deterrence fails.

Focusing on deterrence alone, however, fails to address the very difficult problem of how the United States and its allies and partners can protect their vital interests while avoiding uncontrolled escalation to large-scale nuclear war when the adversary has already escalated to the limited use of nuclear weapons. Focusing on deterrence alone fails to address the complex task of thinking through the military and non-kinetic response options the United States and its allies and partners might require to achieve their objectives while avoiding uncontrolled escalation. Moreover, by

failing to identify the range of response options required, perhaps through multiple instances of limited nuclear weapons employment by both sides, such deterrence-focused analysis also risks failing to identify the capabilities required to provide such options credibly and effectively. Finally, the process of thinking through how to address limited nuclear deterrence failure somewhat counterintuitively provides important insights into how to enhance deterrence of both war and limited nuclear escalation in war that an analytic focus on deterrence alone is unlikely to provide.

Analysis of how to respond to limited nuclear deterrence failure is inherently scenario dependent for a number of reasons. The stakes of the two sides in a conflict have a significant impact on the war aims of the combatants and on their willingness to escalate and counter-escalate in pursuit of those aims. The political circumstances, particularly regarding issues of alliance cohesion and the internal politics of the combatants, also shape the options of both sides. The military circumstances are of course a critical factor in shaping the two sides' strategic and operational objectives and the military means available to pursue them. Analyses must address a range of questions, including: Who is winning or losing, and why and how? Is one side asymmetrically vulnerable to limited nuclear escalation? Could horizontal escalation alter the military situation to one side's advantage? Does one side have an endurance advantage in an extended conflict?

Of course, were the United States to find itself engaged either in a conflict with one nuclear peer while seeking to deter opportunistic aggression by the other, or in simultaneous conflicts with both Russia and China, the interaction of these scenario-specific factors would be far more complex to assess and far more challenging to address.

Project Atom 2024 asked its participants to conduct their analyses in the context of a single 2027 scenario involving two regional conflicts with Russia and China simultaneously. Thus, this paper addresses only that scenario, providing analysis of the four key issue areas identified by the project's designers:

1. U.S. Strategic Objectives If Strategic Deterrence Fails
2. Assuring Allies after Strategic Deterrence Failure
3. Military Response Options after Strategic Deterrence Failure
4. Non-Kinetic Response Options after Strategic Deterrence Failure

As the reader will see, this two-conflict scenario presents U.S. strategists with a complex set of issues. However, a more comprehensive analysis of the overarching two nuclear-armed adversary problem would require asking these same questions across a set of plausible scenarios that span the range of key strategic circumstances the United States might face. Examples of other scenarios that should be examined using the Project Atom 2024 methodology include:

- Conflict with Russia while deterring Chinese opportunistic aggression
- Conflict with China while deterring Russian opportunistic aggression
- Conflict with Russia and China in which the United States is winning conventionally in one theater and losing in the other when deterrence of limited nuclear use fails

- Conflict with Russia and China in which the United States is losing conventionally in both theaters when deterrence of limited nuclear use fails
- The full range of scenarios farther into the future when China is a nuclear peer

There are bound to be additional important insights from analysis of these alternative scenarios that are needed to formulate a comprehensive U.S. strategy for this problem set.

The Scenario in Question

Project Atom 2024 posits a 2027 scenario in which the United States and its allies and partners face collaborative aggression by Russia and China in two theaters simultaneously. The scenario postulates that, despite collaborative Russian-Chinese aggression, U.S. and allied conventional forces far outperform Russian and Chinese conventional forces, almost immediately putting Russia and China in very difficult strategic circumstances 8-10 days after conflict initiation in both theaters. The scenario results in a dire strategic situation in which both Russia and China have initiated limited nuclear escalation, seemingly in response to losing the conventional conflicts they initiated.

As noted earlier, U.S. objectives and potential response options in such a situation would be highly dependent on the specific political-military circumstances of a conflict. In the case of this scenario, however, several key facts regarding the strategic situation are unclear:

- Has the defeat of the Chinese landing force negated China's ability to invade Taiwan, and for how long?
- How long will it take Polish forces to seize the city of Kaliningrad and the rest of Kaliningrad oblast?
- How much have Russian nuclear strikes damaged NATO's ability to reinforce Poland and the Baltic states, and to seize Kaliningrad?
- How many Russian ground forces are where? Along the Baltic states' borders? In Kaliningrad? In Belarus?

Pointing out these uncertainties is not intended as a criticism of the scenario. But the fact that such details regarding the range of strategic circumstances the United States might face have such a significant effect on the analysis of the central problem does raise an issue for future analysis: How much understanding of the potential impacts of limited nuclear use on the course of a theater conflict between nuclear-armed adversaries is required to formulate an effective strategy for the potential range of such contingencies? It is likely that experts are reaching the end of what they can learn about this central question without detailed wargaming and simulation of twenty-first-century theater warfare that includes the limited use of nuclear weapons by one or both sides in the conflict.

Project Atom 2024 is a first step in this direction, as it effectively examines the issues regarding what to do in the wake of limited nuclear deterrence failure by asking the right first-order questions at the unclassified level. But that is not enough. The Department of Defense needs to take up the challenge of a campaign of wargaming and simulation that will provide the necessary analytic basis for informed strategy development and military capability requirements identification.

What follows is an analysis of the four key issue areas in the scenario provided.

U.S. Strategic Objectives If Strategic Deterrence Fails

For the purposes of this analysis, it is assumed that the U.S. stake in both theater conflicts is sufficient for the United States to risk large-scale nuclear war. Whether either adversary perceives this to be true, however, is unclear. Stakes sufficient to take this risk clearly involve vital national security interests. The United States has historically perceived the sovereignty and security of its NATO allies as meeting this test. The purposeful ambiguity regarding whether the United States would intervene to defend Taiwan against Chinese military aggression makes it less certain that Taiwanese security meets this threshold, though the impact of the forcible incorporation of Taiwan into the People's Republic of China on U.S. economic interests and U.S. alliances in Asia could well rise to a vital national interest.

Before identifying potential U.S. strategic objectives in this scenario, it is useful to consider for a moment why deterrence of limited nuclear use failed in both theaters and whether there was something that the United States could have done to enhance deterrence of such nuclear use. While the scenario does not provide sufficient information to determine the answers to these questions with much confidence, it does at least hint at Russian and Chinese motivations for crossing the nuclear threshold.

In both theaters, the adversaries' unexpectedly poor conventional military performance puts them in fairly dire strategic circumstances very early in the conflict. In Europe, the combined effect of Russia's failure to make any significant inroads into the Baltic states while simultaneously failing to stop the NATO offensive into Kaliningrad and eliciting direct NATO military intervention in Ukraine could hardly be worse. In Asia, the destruction of China's invasion fleet before it can reach Taiwan denies the Chinese leadership their primary objective and is followed by internal unrest in opposition to the war. Limited nuclear escalation in both theaters offers some prospect of terminating the conflicts on terms Russia and China can accept, but the scenario does not describe Russian or Chinese intent. Neither adversary pairs their limited nuclear escalation with clear coercive political-military demands, making the purpose of their escalation unclear.

It is tempting to say that the United States failed to clearly and credibly communicate its stake in defending its allies and partners in both theaters. However, it is also possible that the Russian and Chinese leaderships miscalculated not about U.S. will to intervene but rather regarding the ability of Russian and Chinese conventional forces to achieve their objectives even in the face of U.S. intervention if they both attacked at roughly the same time.

There are four U.S. strategic objectives that should be pursued in both theater conflicts.

The first is to restore or maintain the territorial status quo ante. This means that no NATO or Taiwanese territory remains under Russian or Chinese control (respectively) at the end of the conflict. This constitutes a fundamental denial of Russia and Chinese strategic objectives.

The second U.S. strategic objective should be to restore deterrence of further nuclear use by Russia or China. Doing so would enable the United States and its allies and partners to continue to pursue the first strategic objective at lower risk and with a lower level of violence.

The third U.S. strategic objective in both conflicts should be to avoid uncontrolled nuclear escalation. This means deterring large-scale nuclear escalation by Russia and China even if restoring deterrence of further limited nuclear use is unachievable.

The fourth U.S. strategic objective should be to demonstrate that the adversaries' limited nuclear escalation did not result in any meaningful political-military gains. Achieving this objective in one theater could enhance the achievement of the U.S. objectives mentioned above in the second theater. It would also arguably enhance deterrence of future aggression and escalation.

The scenario's description of the Ukraine conflict complicates the establishment of further clear U.S. strategic objectives consistent with the four above objectives. The scenario posits that some eastern NATO allies have begun deploying forces into Ukraine, and NATO airpower is now flying support missions for Ukrainian forces on the offensive in preparation for the liberation of Crimea "within weeks."

It is not clear, however, what U.S. territorial objectives should be in the Ukraine conflict post Russian nuclear use. Combined NATO-Ukraine forces pressing to drive Russian forces from all Ukrainian territory might make restoring deterrence of Russian nuclear use significantly more difficult and could increase the risk of uncontrolled escalation. A less risky, but still ambitious, option would be to demand Russian withdrawal from all Ukrainian territory that Russia has seized since the February 2022 invasion in exchange for NATO withdrawal from the portions of Kaliningrad it now occupies. However, this would leave Russia in control of Crimea.

Regardless of which U.S. objective is chosen regarding Ukraine, U.S. objectives should clearly include termination of all fighting between NATO/Ukraine and Russia, consistent with the achievement of the other U.S. strategic objectives identified above.

What is the relative priority of this set of potential U.S. strategic objectives in this strategic context?

Restoring the territorial status quo ante (with a possible modification regarding Ukraine) while avoiding uncontrolled escalation are undoubtedly the two most important objectives. Achieving these two objectives in both theaters would amount to "victory." Immediately restoring deterrence of nuclear use is not necessary to "win" the conflicts, but doing so would reduce both the cost and the risk of doing so. Achieving the two most important objectives would also arguably result in achieving the fourth objective of denying U.S. adversaries any significant political-military gain through their nuclear escalation, thereby enhancing future deterrence of war and escalation in war.

In the scenario, there is no clear indication of whether success in one theater is more important to the United States than in the other theater. However, one thing is clear: U.S. and allied successes in achieving their objectives in one theater would be likely to affect the decision calculus of the adversary in the other theater regarding further nuclear escalation.

Assuring Allies after Strategic Deterrence Failure

The second key issue noted by the Project Atom 2024 designers involves how the United States can assure its allies and partners in the wake of a failure to deter limited nuclear escalation by an adversary. This is indeed an important question, as one potential adversary motivation to escalate is to shatter U.S.-led alliance cohesion. Maintaining such cohesion is critically important to the achievement of the highest priority U.S. strategic objectives in both theaters. Thus, effectively assuring U.S. allies after strategic deterrence failure is in effect an enabler of the primary war aims of the United States should a nuclear-armed adversary choose to escalate.

Assuring allies in the immediate aftermath of adversary nuclear use, particularly if they have been the target of such use, is more complex than assurance while deterring first use. Allies might be concerned the United States will not respond forcefully enough to either restore deterrence and/or continue to defend their vital interests for fear that the conflict might escalate out of control and put the U.S. homeland at risk. Conversely, allies might fear that the U.S. response to adversary nuclear escalation will elicit further adversary nuclear escalation in the theater, putting the allies at increased risk.

Despite these legitimate concerns, allies and partners in both theaters have no credible alternatives to U.S. nuclear extended deterrence commitments. In NATO, the only non-U.S. nuclear weapons capabilities are French and British. Other NATO allies are unlikely to see those forces as credible alternatives to U.S. nuclear forces in the wake of limited nuclear deterrence failure given the vast superiority of Russian nuclear forces over those of the United Kingdom and France combined.⁵² In Asia, there are no existing alternatives to U.S. nuclear weapons capabilities whatsoever.

If U.S. responses to initial Russian or Chinese escalation make clear that the United States is willing to engage in a competition in dire risk-taking, and that Russia and China must also fear potential uncontrolled escalation, allies are likely to be reassured in the near term. The greatest fear of allies who rely on U.S. extended nuclear deterrence is that in extremis the United States will be unwilling to risk strikes on the United States homeland to defend them. A decisive early demonstration that this fear is unfounded would bolster allies' confidence and potentially convince U.S. adversaries that they had miscalculated about the U.S. stake in the conflict, as well as about U.S. political will to defend that stake resolutely.

However, if the U.S. responses result in further Russian or Chinese nuclear use against U.S. allies and partners, allied confidence will likely go down. Once deterrence has failed—as evidenced by limited adversary nuclear use against U.S. allies or partners—allies will want to be reassured about our ability to defend them against such attacks, not just deter them.

Decisions about how to respond to limited nuclear deterrence failure will be about how best to achieve U.S. (and allied) political-military objectives while avoiding uncontrolled escalation. If the United States succeeds in achieving its objectives while avoiding uncontrolled escalation, allies are likely to be assured. And those U.S. response decisions may need to be made too quickly to allow for extensive consultation if they are to be effective. For example, if an adversary escalates to limited nuclear use in an effort to coerce war termination on terms it can accept because it is decisively

losing the conventional war, how long can we expect them to wait to see if their coercive use has had the desired effect before they decide to escalate further?

Military Response Options after Strategic Deterrence Failure

The third key issue raised by the Project Atom 2024 designers involves the range of potential U.S. military responses to adversary limited nuclear escalation. The relevant range of such military options will be a direct function of the political-military objectives they are designed to achieve or support.

A recap of the U.S. strategic objectives identified above allows one to identify sub-objectives and military options to achieve them:

RESTORE OR MAINTAIN THE TERRITORIAL STATUS QUO ANTE

Potential Sub-Objective: Restore U.S. or allied conventional superiority following limited adversary nuclear strikes on key U.S. or allied conventional forces.

Potential Military Options: Depends on the exact nature of the military impact of adversary nuclear use and the adversary's own vulnerability to U.S. response options. Analysis is required to understand the range of potential targets this objective and sub-objective might dictate and to determine whether currently planned military capabilities enable effective strikes on such targets on operationally relevant timelines.

RESTORE DETERRENCE OF FURTHER NUCLEAR USE BY RUSSIA AND CHINA

Potential Sub-Objective: Convince adversary that their nuclear escalation was a dire miscalculation regarding how the United States would respond and that further adversary escalation will fail to achieve their objectives while increasing the risk of uncontrolled escalation.

Potential Military Options: Must exceed either the level of violence or the strategic impact that *the adversary anticipated*—likely difficult to know with confidence—in order to shake their confidence in their ability to gauge how the United States might respond to further escalation. There is a potential role here for the calculated revelation of capabilities of which the adversary was previously unaware that have potentially decisive military effects (“You didn’t tell me they could do *that*. What else don’t I know?”).

AVOID UNCONTROLLED NUCLEAR ESCALATION

Potential Sub-Objective: Convince adversary that U.S. nuclear responses and conventional operations are being conducted in pursuit of limited war aims that do not constitute an immediate threat to state survival and do not constitute the initiation of a large-scale counterforce attack designed to negate their strategic nuclear deterrent.

Potential Military Options: Avoid strikes that threaten the adversary's ability to detect nuclear attacks, command and control their nuclear forces, etc. Pair messaging about the

purpose of the U.S. response with promises of U.S. restraint if Russia or China were to cease nuclear use.

DEMONSTRATE ADVERSARY LIMITED NUCLEAR ESCALATION DID NOT RESULT IN MEANINGFUL POLITICAL-MILITARY GAINS

Potential Sub-Objectives: Send a message to the adversary in the second theater of conflict that limited nuclear escalation is unlikely to have the coercive effects they seek. Send a message to future potential adversaries that there is no nuclear coercive offramp from failed conventional aggression against the United States and its allies.

Potential Military Options: Almost all the options noted above could serve this purpose if effective in denying the adversary their objectives and in making clear that further nuclear escalation increases the risk of uncontrolled escalation. The nature and extent of U.S. and allied resolve must be messaged appropriately.

TERMINATION OF FIGHTING BETWEEN NATO/UKRAINE AND RUSSIA, CONSISTENT WITH ACHIEVEMENT OF OTHER U.S. STRATEGIC OBJECTIVES

Potential Sub-Objective: Create facts on the ground that provide negotiating leverage that enables termination of the Ukraine conflict.

Potential Military Options: Seize more or all of Kaliningrad to use as a bargaining chip. Escalate level of NATO military intervention in Ukraine conflict.

There are several key issues associated with the military response options outlined above that need to be taken into account.

NUCLEAR OR NONNUCLEAR RESPONSE?

The first of these is whether the U.S. military responses to Russian or Chinese nuclear use should be nuclear or nonnuclear. If the objective of the U.S. military response is to restore deterrence of nuclear use, then there are several problems with a nonnuclear response. First, if the purpose of the adversary's escalation was to coerce war termination on terms they can accept because they are decisively losing the conventional war, then a nonnuclear response may convince them that they simply need to hit the United States harder in pursuit of their objective. Further, they may conclude that it safe to escalate because the United States is reluctant to respond in kind for fear of uncontrolled escalation. Second, if restoring deterrence requires that the United States respond in a more severe way than anticipated by the adversary in order to convince them that they cannot be confident in predicting future U.S. responses to further escalation, then a nonnuclear response is less likely to meet this criterion.

If the U.S. objective is to restore U.S. or allied conventional superiority following limited adversary nuclear strikes, then the decision to respond with nuclear or nonnuclear weapons should hinge in part on which response is most likely to be more militarily effective. Increasing the range of relevant targets susceptible to a U.S. nuclear or nonnuclear response option would increase the range of options available to the president.

Finally, for the U.S. objective of avoiding uncontrolled nuclear escalation, at first glance it might seem that nonnuclear military response options may be preferred. And in some circumstances this would be true. However, if the effect of selecting a nonnuclear response to adversary nuclear escalation is to convince the adversary that the United States is so concerned about uncontrolled escalation that it fears responding in kind, then a U.S. nonnuclear response could actually increase the risk of eventual uncontrolled escalation. This may seem counterintuitive, but if a U.S. nonnuclear response to adversary limited nuclear use results in encouraging further adversary nuclear escalation, then the U.S. nuclear responses that may eventually be required to achieve U.S. objectives are likely to be larger in scale and more provocative in their effects. This could well make uncontrolled escalation more likely.

STRIKE RUSSIAN OR CHINESE TERRITORY WITH NUCLEAR WEAPONS?

The second key issue regarding U.S. military responses to adversary limited nuclear use involves whether to strike targets on Russian or Chinese territory with nuclear weapons given the potentially escalatory nature of such action. On the one hand, strikes on the adversary's homeland would cross a potential firebreak against uncontrolled escalation. On the other hand, making the adversary's territory a sanctuary from U.S. limited nuclear responses could create a potentially decisive asymmetry in the ability of the two sides to achieve relevant military effects with nuclear weapons. A limited U.S. nuclear response (or a credibly communicated threat) that makes clear that Russian or Chinese territory will not be a sanctuary if the adversary continues to escalate could be effective in restoring deterrence following adversary first use. This decision in particular will be highly scenario dependent.

RANGE OF AVAILABLE NUCLEAR OPTIONS

The effectiveness of U.S. military response options in the wake of adversary limited nuclear escalation will in part be a function of the range of available nuclear options available to the U.S. president. Identifying future nuclear force and capability requirements first requires development of a future strategy for addressing the two-peer nuclear threat environment, a strategy that is likely to create new operational requirements for nuclear and conventional forces. But strategy development alone is not enough. Detailed wargaming and simulation is needed to analyze the ways in which limited nuclear use by both sides potentially affects the course of twenty-first-century conflict and escalation dynamics across a range of scenarios and strategic circumstances. Without such analysis, U.S. efforts to identify the range of nuclear options needed to address limited nuclear escalation will risk missing key insights.

HOW TO MESSAGE U.S. INTENT AND WAR AIMS PAIRED WITH A GIVEN MILITARY RESPONSE

As Thomas Schelling first made clear in his book *Strategy of Conflict*, there are certain strategic circumstances in which deterrence or the avoidance of further escalation can only be achieved if one pairs a credible threat of military response with a credible promise of restraint that provides the adversary with an acceptable, if not desirable, offramp. Given the clear role of coercive limited nuclear use in Russian strategy and doctrine, and the potential for China to adopt a similar strategy and practice when it soon acquires the necessary nuclear capabilities, the United States must

determine how it will formulate and implement this pairing of threat with promise to deter such limited nuclear use. This includes not only ensuring that U.S. nuclear forces have the requisite range of capabilities to make the threat element credible and effective, but also determining what forms of restraint the United States is willing to promise and how to make such promises credible and effective in the context of a high-intensity theater conflict in which nuclear weapons have already been employed.

RECOMMENDED MILITARY RESPONSE OPTIONS

The final step in a scenario-based analysis of this central problem is making recommendations regarding U.S. military responses to Russian and Chinese nuclear escalation in this scenario.

Regarding Russian escalation, the United States should simultaneously pursue its objectives of restoring the territorial status quo ante, reestablishing deterrence of further nuclear use, and restoring U.S. and allied conventional superiority following limited Russian nuclear strikes. This could be done by executing low-yield nuclear strikes on key military targets in Kaliningrad paired with clear messaging that Russia must halt further nuclear use and that U.S. war aims are limited to restoring the territorial status quo ante vis-à-vis NATO (and possibly a return to the pre-February 2022 borders in Ukraine). However, should Russia escalate with further nuclear use, U.S. war aims might change, and U.S. military responses will become more severe.

Regarding China, assuming Chinese forces are no longer capable of conducting a Taiwan invasion due to U.S. and allied conventional actions, simultaneously pursuing the U.S. objectives of restoring deterrence and restoring U.S. and allied conventional superiority following limited Chinese nuclear strikes (as the territorial status quo ante already is intact) could be an appropriate course of action. This could take the form of a U.S. response in kind on three of the militarized islands in the South China Sea: Mischief Reef, Subi Reef, and Fiery Cross. Such strikes would not affect the Chinese mainland and, given the U.S. position on territorial disputes in the South China Sea, would not constitute attacks on Chinese territory. This response would make clear that the United States will neither tolerate, nor be disadvantaged by, Chinese limited nuclear use. These strikes should be paired with clear messaging that U.S. war aims are limited to defending Taiwan and our regional allies and to achieving an immediate ceasefire. However, it should be kept in mind that should China escalate with further nuclear use, U.S. war aims might change and the Chinese mainland may not be a sanctuary.

Non-Kinetic Response Options after Strategic Deterrence Failure

There is a wide array of potential non-kinetic response options to adversary limited nuclear use in this scenario that could further the achievement of the U.S. strategic objectives identified above. The most important of these are the following (in descending order):

1. Messaging in support of achieving the purposes of U.S. military responses to adversary limited nuclear use. How this might be done has been discussed above. Formulating this

kind of messaging should become part of both the political-military planning process and the presidential decision-support process.

2. Information actions designed to make the adversary a pariah for having been the first to violate the nuclear taboo since 1945. The purpose of this is to make it difficult, if not impossible, for third parties to side with Russia or China in the wake of their nuclear escalation, and to affect the Russian and Chinese leaderships' decision calculus regarding further escalation.
3. Information actions designed to convince both elements of Russian and Chinese political and military leadership, and the Russian and Chinese populations, that their leaders' actions are risking large-scale nuclear war and the destruction of their nations in a failing pursuit of nonessential objectives. The purpose of this is to put pressure on the leadership to terminate the conflict.
4. Economic actions designed to make clear that the longer the adversaries continue the war, the more long term the economic damage they will incur. This also serves the purpose of pressuring their leaderships to terminate the conflict, though it is not clear that such economic effects can be imposed on a timeline sufficient to affect relatively near-term adversary decisionmaking.

Impact of the Law of Armed Conflict on U.S. Military Responses

Finally, Project Atom 2024 asked how U.S. policy, when U.S. nuclear planning and operations comply with the law of armed conflict, might affect U.S. military responses in this scenario. Compliance with the law of armed conflict poses no insurmountable barriers to the United States developing effective military response options in support of the array of potential strategic objectives identified in this paper.

Conclusion

The insights derived from this analysis make clear that there is a need to move beyond thinking only about how to deter aggression and subsequent escalation in wars with multiple nuclear-armed adversaries in the twenty-first century. The failure of deterrence of limited nuclear use would create extremely dangerous circumstances, but there are plausible ways to achieve U.S. and allied strategic objectives without automatically triggering large-scale nuclear war.

Having said that, there is a need to expand the scope of the initial Project Atom 2024 analysis to address the full range of plausible scenarios and strategic circumstances in which the United States and its allies and partners might face the challenge of responding to a failure to deter limited nuclear use in a theater conflict with Russia or China. In the scenario addressed here, the United States and its allies find themselves rapidly and decisively winning the conventional war in both theaters simultaneously. As a result, Russian and Chinese nuclear escalation seems to be motivated by a desire to terminate the conflicts on terms they can accept before U.S. and allied conventional

success further worsens the outcome. This is a very different strategic circumstance than a scenario in which an adversary is winning the conventional conflict and seeks to secure rapid victory through limited nuclear escalation, or one in which the United States is forced to consider limited nuclear first use to prevent a decisive conventional military defeat. Analysis of those and other scenarios and circumstances would likely produce new and important insights regarding the four key issues addressed in this project.

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Endnotes

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norm, weaponizing and manipulating the West's internalization of the "nuclear taboo." To the degree that this is true, the United States may thus be able to deter them better if it treats nuclear weapons use as being a bit less axiomatically "out of bounds" itself.

7 Indeed, the United States might end up with *more* capability. The mere fact of adversary aggression in this scenario would give the United States (and its allies) more leeway after the conflict—or during an armistice—to develop and deploy more flexible theater-range nuclear forces, thus making nuclear deterrence more credible in precisely these sorts of scenarios. The United States has been remiss in this respect in the past, but this crisis might well spur it to remedy this capability gap.

8 The United States would also attempt through various public, and perhaps less public, informational means to ensure that key stakeholders and the general population in both Russia and China understand the degree to which their leaders' aggressive actions are creating real risk of a nuclear war that would devastate their societies and economies.

9 When asked why he robbed banks, the infamous thief William Francis Sutton is remembered as having responded: "Because that's where the money is."

10 This approach is recommended based upon current options. At such point as the Submarine Launched Cruise Missile-Nuclear (SLCM-N) becomes available, using that weapon would be preferable, as any observable attack profile with that system would be even more "distinguishable" from a potentially existential strategic assault. This scenario illustrates how desperately unwise it was, from a deterrence perspective, for U.S. leaders to have abandoned and then for so long forsworn the development of new theater-range nuclear capabilities analogous to those the Russians and Chinese have deployed against the United States in abundance. The United States clearly needs more such capabilities.

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tion. Could anyone wish his name to be coupled by history with such human degradation and destruction? . . . The concept of atomic war is too horrible for man to endure and to practice, and he must find some way out of it.’” McGeorge Bundy, *Danger and Survival: Choice About the Bomb in the First Fifty Years* (New York: Random House, 1988), 254. It seems likely that Eisenhower’s successors, rationally, recognize the same.

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- 49 Erik Lin-Greenberg provides a current example of this in the context of Israeli and Iranian bilateral coercion: “Even the best efforts to avoid escalation can fail. Decision-makers may misjudge their rivals’ thresholds, taking actions that opponents perceive as more provocative than intended, as Israel did when it attacked Iran’s embassy in Syria. Israeli officials expected a minor retaliation, not an onslaught of hundreds of missiles and drones.” Erik Lin-Greenberg, “Wars Are Not Accidents: Managing Risk in the Face of Escalation,” *Foreign Affairs* (November/December 2024), October 8, 2024, <https://www.foreignaffairs.com/world/wars-are-not-accidents-managing-risk-erik-lin-greenberg>.
- 50 James M. Acton, “Inadvertent Escalation and the Entanglement of Nuclear Command-and-Control Capabilities,” Belfer Center for Science and International Affairs, October 29, 2018, <https://www.belfercenter.org/publication/inadvertent-escalation-and-entanglement-nuclear-command-and-control-capabilities>.
- 51 The perception of being in a “use it or lose it” situation long has been theorized to increase the likelihood of nuclear launch. See, for example, Karl P. Mueller et al., “The Best Defense? When and Why States Strike First” in Karl P. Mueller et al., *Striking First: Preemptive and Preventive Attack in U.S. National Security Policy* (Santa Monica: RAND Corporation, 2006), 19-42; Keir A. Lieber and Daryl G. Press, “The New Era of Counterforce: Technological Change and the Future of Nuclear Deterrence,” *International Security* 41, no. 4 (Spring 2017): 9-49; Robert Jervis, “Arms Control, Stability, and Causes of War,” *Daedalus* 120, no. 1 (Winter 1991): 167-181; Glenn A. Kent and David E. Thaler, *First-Strike Stability: A Methodology for Evaluating Strategic Forces* (Santa Monica: RAND Corporation, 1989), <https://www.rand.org/pubs/reports/R3765.html>; and Desmond Ball et al., “Crisis Stability and Nuclear War,” *Bulletin of the American Academy of Arts and Sciences* 40, no. 8 (1997): 18-28, <https://doi.org/10.2307/3823983>.
- 52 “German officials appear unconvinced that Paris can muster the political will to change long-standing biases and practices that cut against a generalised European nuclear deterrent. France’s relationship with NATO has customarily been rocky, whereas Germany is steadfastly dedicated to the Alliance’s existing structures. Some in Berlin also believe that France’s nuclear doctrine of strict sufficiency is too restrained to credibly deter Russia and wonder whether France could really bring itself to reconsider it.” Héloïse Fayet, Andrew Futter, and Ulrich Kühn, “Forum: Towards a European Nuclear Deterrent,” *Survival Online*, September 27, 2024, <https://www.iiss.org/online-analysis/survival-online/2024/09/forum-towards-a-european-nuclear-deterrent/>.

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