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Charting the New Nuclear Age

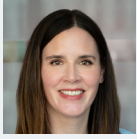
Scenarios for the Two-Nuclear-Peer Challenge

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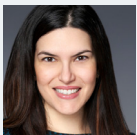
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About the CNAS Defense Program

Over the past 19 years, CNAS has defined the future of U.S. defense strategy. Building on this legacy, the CNAS Defense Program team continues to develop high-level concepts and concrete recommendations to ensure U.S. military preeminence into the future and to reverse the erosion of U.S. military advantages vis-à-vis China and, to a lesser extent, Russia. Specific areas of study include concentrating on great power competition, developing a force structure and innovative operational concepts adapted for this more challenging era, and making hard choices to effect necessary change.

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Executive Summary

With the continued growth of China's nuclear arsenal, the United States will likely face two nuclear peer threats in the coming years. The United States cannot discount the possibility that either China or Russia—or both—could escalate to nuclear use in a possible conflict, especially if the two countries coordinate. To defend its interests at home and abroad, the United States must consider how to deter and compete with two nuclear peers (2NP) simultaneously.

Findings Summary

The project yielded several major findings, summarized here and detailed on the following pages:

- Russia and China do not need to collaborate to create serious deterrence challenges for the United States. Their individual opportunistic actions could collectively strain U.S. forces without coordination, joint operations, or shared intelligence.
- Protracted, lower-level simultaneous conflicts can pose serious challenges and are more likely than concurrent high-intensity wars.
- Nuclear signaling is particularly difficult when facing two separate adversaries simultaneously, and the United States currently lacks the tools and practice to credibly communicate resolve across the spectrum of conflict in both theaters at once.
- Homeland defense and nuclear deterrence missions compete with conventional operations for the same limited, high-demand assets. This tension is particularly acute when the United States is confronting simultaneous crises or conflicts against two near peers that can threaten the homeland with conventional and nuclear weapons.
- The role of allies in 2NP scenarios requires more exploration: What will be needed to reassure them, what capabilities can they contribute, and would they accept a sequenced U.S. response that prioritizes one theater over the other?

Methodology

The Defense Program at the Center for a New American Security (CNAS) conducted a project for the Defense Threat Reduction Agency (DTRA) between 2025–2026 to consider how the U.S. military could enhance its



A U.S. Air Force Payload Transporter Erector is placed over a missile silo trainer at Malmstrom Air Force Base, Montana, March 20, 2026. (Photo by Airman 1st Class Ethan Wilson / U.S. Air Force)

preparedness for a possible 2NP challenge in the future. After completing a literature review and a small-group workshop, the authors devised a 2NP scenario-building framework and notional 2NP conflict scenario to inform a tabletop exercise (TTX) with select experts. The following findings and recommendations from the study for U.S. Department of War (DoW) military and civilian leaders and others to consider are detailed below.

Key Findings and Recommendations

Finding

Russia and China do not need to collaborate to create serious deterrence challenges for the United States. In the TTX, Russia and China pursued independent, opportunistic actions that collectively strained U.S. forces without requiring coordination, joint operations, or shared intelligence.

Recommendations

- The Department of War (DoW), Office of the Undersecretary of War for Policy (OSW-P), DTRA, Joint Staff J-8, U.S. Strategic Command (STRATCOM), Global Strike Command, U.S. European Command, and U.S. Pacific Command should apply the scenario framework to generate additional sequential 2NP scenarios and explore these through structured analysis and TTXs. The baseline scenarios created for this project provide a starting point, but additional variants are needed to test different combinations of adversary actions, timing, and escalation levels.
- The DoW should resist the impulse to focus exclusively on the most stressing scenario of simultaneous, high-intensity conflicts requiring deep Sino-Russian coordination. Opportunistic, sequential aggression is more likely because it does not require deep trust and coordination between Beijing and Moscow and, as this analysis demonstrates, can impose substantial costs on the United States even without formal cooperation between the two adversaries.

Finding

Protracted, lower-level simultaneous conflicts can pose serious challenges and are more likely than concurrent, high-intensity wars. During the TTX, each 2NP adversary pursued calibrated, steady escalation below the threshold of direct military engagement with the United States. This included gradually expanding blockades and engaging in escalatory military harassment without clear-cut aggression—constraining U.S. response options and complicating American decision-making. The narrow range of options available to roll back adversary gains while preventing further escalation left U.S. players in a persistent strategic bind.

Recommendations

- The DoW should challenge assumptions that great power crises and moderate intensity conflicts will be short and decisive. The nuclear capabilities of all parties create strong incentives for escalation management that increases the likelihood of protracted conflict. The United States must plan for sustained operations across two theaters simultaneously.
- OSW-P, the Joint Staff J-4, and U.S. Transportation Command should assess the ability to swing forces between theaters under realistic conditions, including degraded information environments, cyberattacks on logistics networks, and competing demands for key assets from homeland defense and nuclear deterrence missions.
- OSW-P should examine how space and cyber capabilities—which are less constrained by distance—can bolster deterrence and warfighting in two theaters simultaneously to compensate for conventional weapons systems that take time to deploy.

Finding

Nuclear signaling is particularly difficult when facing two separate adversaries, and the United States currently lacks the tools and practice to credibly communicate resolve across the spectrum of conflict in both theaters at once. In the TTX, Red assessed that Blue's nuclear signaling was insufficient to alter its decision-making. Strategic bombers were the only visible, deployable nuclear capability in the Pacific and were overextended between conventional strike and nuclear signaling missions. Military actions to ready nuclear delivery platforms were not paired with direct strategic communications from senior leaders, and their intent was not clearly received by either adversary.

Recommendations

- The DoW should explore options for acquiring theater-level nuclear forces, such as ground-based missiles, tactical aircraft, and surface ships, which can be deployed forward, particularly to the Pacific, and that are visible enough to be useful for signaling. The current reliance on strategic bombers for both conventional operations and nuclear deterrence would likely overstretch the bomber and tanker force.

- OSW, STRATCOM, and the Air Force could increase stealth bomber and airborne refueling aircraft procurement to expand the U.S. military's capacity to simultaneously conduct conventional deterrence and warfighting, and nuclear signaling and operations against two peer adversaries.
- The Joint Staff and the services should increase training and exercising of U.S. forces for nuclear operations so that they can be employed quickly and effectively to signal resolve and demonstrate resilience on a possible nuclear battlefield. The U.S. military has fallen out of practice with explicit nuclear signaling, and this gap was evident throughout the exercise.
- DTRA could conduct TTXs focusing on theater-level nuclear forces and integrated conventional and nuclear capabilities with senior leaders that build familiarity with the strengths, weaknesses, and risks of different signaling options and require them to tightly link strategic communications to military actions.

Finding

Homeland defense and nuclear deterrence missions compete with conventional operations for the same limited, high-demand assets. As the 2NP scenario escalated, U.S. Northern Command, STRATCOM, and the theater combatant commands competed for tankers, bombers, and airborne early warning aircraft. The existing force structure was not adequate to meet these mission demands simultaneously, and every deployment decision in one theater directly weakened posture in the other.

Recommendation

- OSW-P and the Joint Staff should evaluate the adequacy of the Joint Force's high-demand, low-density assets against the requirements of simultaneous 2NP operations, including concurrent homeland defense, nuclear deterrence, and theater conventional missions and identify specific shortfalls and investment priorities.

Finding

The role of allies in 2NP scenarios requires more exploration: What will be needed to reassure them, what capabilities can they contribute, and would they accept a sequenced U.S. response that prioritizes one theater over the other? In the TTX, Blue players sought to defer a full response to Russian aggression in Europe while focusing on the Pacific, but it was unclear that European allies would be able to hold their own or would accept delayed American engagement even in a limited contingency. This could prompt them to make additional investments in conventional capabilities, which would be welcomed, but could also spur undesirable nuclear proliferation. Maintaining strong cooperation between American allies and partners in 2NP scenarios sends a powerful deterrent signal and highlights the relative isolation of Russia and China compared to the coalition arrayed against them.

Recommendations

- OSW-P should initiate structured consultations with Pacific and NATO allies on 2NP contingencies, focusing on what capabilities they could contribute, what assurances they would require, why this level of preparation may be necessary, and what allies can do to improve their ability to defend with limited U.S. assistance. These consultations should proceed at the working level for discussions of specific capabilities, which can be reinforced by strategic-level discussions for issues dealing with assurance.
- When possible, the DoW should incorporate allies into future 2NP tabletop exercises to gain direct insight into their perspectives, particularly on escalation management, access, basing, and overflight, restrictions on offensive operations, and the demands they would place on the United States for extended deterrence guarantees.
- The Joint Staff and DTRA should conduct additional analysis on the issue of cross-theater credibility to include running TTXs focused on allies' and Reds' perspectives and reactions to this approach. Adversaries and allies alike must believe that the United States has not only the capability, but also the will to uphold its extended deterrence commitments. Strong U.S. action to defend an ally or partner in one theater could be read as a signal of broader American resolve to defend allies, but that inference is far from assured.

Introduction

The United States has entered a new nuclear era.¹ After the Cold War, Washington sought to reduce the role of nuclear weapons in its strategy and relied on conventional overmatch to deter and defeat aggression.² Its adversaries responded by investing in asymmetric capabilities, including anti-access area-denial systems and nuclear weapons. Now unconstrained by arms control agreements, Russia has modernized its strategic arsenal, developed exotic delivery systems to circumvent missile defenses, and maintains the world's largest nonstrategic nuclear stockpile.³ Its 2022 invasion of Ukraine shattered assumptions that high-intensity conflict in Europe was a relic of the past, while its nuclear threats raised the specter of deliberate escalation, weakening the nuclear taboo.⁴ Meanwhile, China is in the midst of a strategic breakout, constructing new missile silo fields, fielding road-mobile intercontinental ballistic missiles (ICBMs), expanding theater delivery systems, and building low-yield warheads.⁵ Prior research by the Defense Program at the Center for a New American Security (CNAS) has traced the implications of these developments. *Long Shadows* surveyed the emerging multipolar nuclear landscape.⁶ *Avoiding the Brink* found that China's expanding arsenal will provide it with coercive options that did not previously exist.⁷ *Over the Brink* demonstrated that protracted conventional conflict increases the risk of deliberate limited nuclear use.⁸ The United States now faces an "unprecedented" and "far more complex and challenging" nuclear environment, one that nuclear experts and former Biden administration officials Vipin Narang and Pranay Vaddi characterized as "a Category 5 hurricane of nuclear threats."⁹

What makes this environment so dangerous is not only the capabilities of each adversary individually, but the prospect of facing both simultaneously or sequentially.¹⁰ Analysis of the two-nuclear-peer (2NP) challenge is at an early stage and there is a risk of focusing on the most stressing scenario: two simultaneous, high-intensity conflicts enabled by coordinated Sino-Russian action.¹¹ Opportunistic scenarios that feature sequential, uncoordinated aggression are more likely because they do not require a high degree of mutual trust and strategic commitment between Beijing and Moscow.¹²

The space between gray zone provocations and all-out war remains underexplored. This project was designed to widen the aperture by developing a framework that captures the full range of 2NP scenarios, then testing the framework through structured analysis and

an exploratory tabletop exercise (TTX). The Defense Program at CNAS conducted this project for the Defense Threat Reduction Agency (DTRA) between 2025 and 2026. The team convened a workshop of nuclear, conventional, and regional experts; developed a scenario framework organized around the key variables that define a 2NP conflict; applied the framework to construct a scenario for a TTX; and ran the TTX once as an initial exploration of the problem. The findings and recommendations that follow identify areas that merit further analysis and testing rather than offering definitive conclusions.

Findings Summary

The project yielded several major findings, summarized here and detailed on the following page:

- Russia and China do not need to collaborate to create serious deterrence challenges for the United States. Their individual opportunistic actions could collectively strain U.S. forces even without coordination, joint operations, or shared intelligence.
- Protracted, lower-level simultaneous conflicts can pose serious challenges and are more likely than concurrent high-intensity wars.
- Nuclear signaling is particularly difficult when facing two separate adversaries simultaneously, and the United States currently lacks the tools and practice to credibly communicate resolve across the spectrum of conflict in both theaters at once.
- Homeland defense and nuclear deterrence missions compete with conventional operations for the same limited, high-demand assets. This tension is particularly acute when the United States is confronting simultaneous crises or conflicts against two nuclear peers that can threaten the homeland with conventional and nuclear weapons.
- The role of allies in 2NP scenarios requires more exploration: What will be needed to reassure them, what capabilities can they contribute, and would they accept a sequenced U.S. response that prioritizes one theater over the other? Concerns that the U.S. military may not be able to come to their defense could prompt allies to make additional investments in their own conventional capabilities, which would be welcomed, but could also spur undesirable nuclear proliferation.

Methodology

The CNAS Defense Program applied a scenario-based analysis to the 2NP challenge to gain a better understanding of the full spectrum of the problem. This analysis proceeded in three cumulative stages.

In the first stage, the team convened a working group of 15 nuclear, conventional, and regional subject-matter experts for an in-person discussion to elicit perceptions on the risks of a 2NP conflict, understand gaps in U.S. preparations and capabilities for responding to one, and identify which variables are most important in defining and understanding 2NP conflict scenarios. The workshop illuminated the critical variables for defining the specifics of a 2NP conflict.¹³

During the second stage, the CNAS Defense Program developed a 2NP framework based on insights from the working group and additional research. The framework employs a decision tree approach to develop a range of 2NP scenarios.¹⁴ The parameters of this tool are based on the variables that workshop participants generated and CNAS research and analysis of the two-war problem. This tool, which is described in depth on page 9, allows researchers, analysts, and game designers to systematically consider the full breadth of the 2NP scenario space and deliberately construct scenarios based on their research objectives.

In the third stage, the CNAS Defense Program used the framework to develop a scenario for an exploratory TTX. This TTX, described on page 10, employed a combination of strategy and course of action (COA) deliberation, red teaming, and retrospective analysis. Blue team players were given a scenario describing actions taken by Russia and China in a notional 2NP conflict and were asked to develop a strategy to respond to these actions and to modify or select from a menu of COAs. A scripted Red second move was then provided and the Blue team developed its response.¹⁵ During each round, a separate Red team of China and Russia experts analyzed the Blue team's actions, determined how they would have responded, and critiqued the scenario. After two rounds, all players convened for a plenary hotwash, where they retrospectively assessed what alternative actions they could have taken to prevent further escalation or to have ended the conflict on favorable terms, and what factors constrained their choices during the game.

Games are not predictive but rather indicative, and a single iteration of a TTX exploring a problem with as many permutations as this one should be understood accordingly. This was an exploratory TTX run once to

begin examining the 2NP problem. It yielded insights that require further analysis and testing rather than high-confidence findings. The findings and recommendations reflect this approach.

Analysis

This section presents the combined analytic results of the methods used to conduct this project.

The Two-Nuclear-Peer Challenge

China and Russia harbor revisionist ambitions and have significant conventional and nuclear capabilities that could enable them to realize these aims. The following section describes their nuclear modernization efforts; the extent to which they cooperate with one another; and how the United States is postured to counter these challenges.

CHINA'S NUCLEAR MODERNIZATION

Among its adversaries, the U.S. government has designated China as its pacing threat across presidential administrations.¹⁶ Of particular concern is China's nuclear weapons program, which is in the midst of a strategic breakout. Defense Intelligence Agency estimates from 2020 indicated that China had 200 nuclear warheads, but the revised 2024 estimate placed the warhead count at 500; the total is expected to exceed 1,000 warheads by 2030.¹⁷ The ground-based leg of China's nuclear triad appears the furthest along, with three ICBM silo fields, including at least 100 silos loaded with solid-fueled missiles, and more road-mobile ICBMs.¹⁸ Though these estimates fall short of the U.S. nuclear stockpile, China's strategic breakout is worrisome in the face of growing competition in the Pacific region and China's ambition to reincorporate Taiwan—by force if necessary. As of 2024, China's stated policy remains no first use of nuclear weapons, but policy, unlike capability, can change quickly.¹⁹ In addition to China's expanding stockpile of nuclear warheads, the People's Liberation Army (PLA) is also evolving its nuclear readiness and delivery capabilities—embracing a launch-on-warning (LOW) posture, introducing novel delivery capabilities to overcome American early warning and missile defense systems, and building out its capabilities for theater-level nuclear warfighting.

In 2024, the Pentagon concluded that the PLA would implement a LOW posture by the end of the decade, as part of an "early warning counterstrike" doctrine.²⁰ China is in the process of building the infrastructure for a LOW posture: early warning sensors, nuclear command and

control networks that can rapidly disseminate launch orders, and ICBMs maintained at a high rate of readiness.²¹ This development is consistent with China's stated goal of strengthening deterrence because it enhances the survivability of China's arsenal and is not a first-strike capability. A LOW posture would introduce some risk in a crisis or conflict between the United States and China by compressing decision-making timelines, increasing the probability that China retaliates hastily based on false or ambiguous warning of an American nuclear strike. Additionally, it may push China to pre-delegate launch authority, which also increases the risks of miscalculation.²² The LOW posture's real significance, however, is that it indicates that China has significantly upgraded the readiness of its strategic deterrent.

China is also diversifying its nuclear delivery systems to ensure its ability to penetrate U.S. missile defenses and retaliate after an attack. Three exotic new systems stand out: hypersonic missiles, fractional bombardment systems (FOBs), and air-launched ballistic and cruise missiles:

- China possesses the largest arsenal of hypersonic glide vehicles (HGVs) in the world.²³ China's DF-17 is a medium-range ballistic missile armed with HGV that primarily carries a conventional warhead.²⁴ China's newer DF-27 intercontinental-range ballistic missile (ICBM) is likely equipped with a dual-capable HGV.²⁵
- Beijing is also pursuing a FOB capability to circumvent U.S. missile defenses.²⁶ In 2021, China test-fired an HGV using a FOB trajectory from an ICBM, traveling approximately 40,000 kilometers over the course of 100 minutes.²⁷ In 2024, the Pentagon concluded that the PLA was developing a nuclear-capable FOB delivery capability.²⁸ The combination of FOB trajectories and HGVs poses a particularly difficult challenge to detect, track, and intercept.
- Finally, the People's Liberation Army Air Force is in the process of developing air-launched nuclear-capable cruise missiles and ballistic missiles (ALBMs). The AS-X-13 ALBM was fielded as of 2024, though China's air-launched cruise missile (ALCM) development has lagged behind other programs.²⁹

China's nuclear modernization is also probably placing greater emphasis on lower-yield warheads, particularly those below 10 kilotons (kt), so that they could employ theater weapons, such as the DF-26 IRBM and the AS-X-13 ALBM, against military forces in the Pacific theater.³⁰

At the same time, China is blurring the line between its conventional and nuclear forces. The People's Liberation Army Rocket Force, originally conceived as China's nuclear deterrent, now operates a huge arsenal of conventional missiles under a "dual deterrence, dual operations" requirement.³¹ China may also be exploring conventionally-armed ICBMs which would enable China to threaten conventional strikes against targets in the continental United States, Alaska, and Hawaii.³² Co-locating and co-deploying nuclear and conventional missiles complicates any outside assessment of Chinese intent during a crisis or conflict, increasing the risk of miscalculation and escalation. Together, the pursuit of low-yield nuclear weapons and dual-use ballistic missiles suggests that China could incorporate nuclear use in a conventional conflict as a coercive tool to deter third-party intervention or to compel conflict termination on favorable terms.³³

RUSSIA'S NUCLEAR MODERNIZATION

Nuclear weapons have been a prominent component of Russian defense and deterrence strategy dating back to the Soviet era.³⁴ Its concept of strategic deterrence incorporates conventional and nuclear forces to deter aggression, while ensuring a range of military and nonmilitary response options should deterrence fail.³⁵ Like China, Russia maintains that its nuclear weapons program is for defensive purposes; however, Russia has amassed an arsenal of more than 4,000 nuclear warheads, though efforts to modernize its nuclear-capable systems have lagged for decades.³⁶ Limitations on deployed strategic warheads imposed by decades of arms control agreements ended in February 2026 with the expiration of the New Strategic Arms Reduction Treaty (START).³⁷ Russia—and the United States—no longer face constraints on expanding their nuclear programs, which could further weaken the security environment in the European theater.³⁸

Russia is developing new weapons with the ability to penetrate missile defenses, which suggests Moscow might use nuclear weapons in novel ways. In 2024, Russia employed the Oreshnik IRBM armed with multiple conventional warheads against Ukraine. The missile is also nuclear-capable, and Russian President Vladimir Putin claimed it is hypersonic, though experts have questioned this claim.³⁹ The Poseidon long-range nuclear torpedo is another concerning development, since its range and payload—2 megatons—could be launched by submarine to devastate coastal U.S. cities.⁴⁰ Moscow even has plans for a nuclear space weapon that would destroy some satellites outright with direct

radiation, but more importantly, residual radiation would degrade all satellites in low Earth orbit, making it uninhabitable for some time.⁴¹

Russia has the largest stockpile of nonstrategic nuclear weapons in the world, estimated at 1,000–2,000 non-strategic warheads, which were never limited by New START.⁴² Some analysts argue that Russia has lowered its threshold for nuclear use and may “escalate to deescalate” or use nuclear threats to terminate a conflict on favorable terms.⁴³ Additionally, Russia has employed chemical weapons in Ukraine and has repeatedly signaled that it might employ low-yield nuclear weapons if red lines are crossed.⁴⁴ Russia has also introduced new weapons in its war in Ukraine, including the Kinzhal hypersonic missile.⁴⁵ These developments raise a more consequential question: Under what conditions might Russia actually employ a nuclear weapon in Ukraine or in a broader conflict with NATO? This risk is particularly acute if Russia is losing or Putin concludes that his hold on power is threatened.⁴⁶

DELAYED U.S. NUCLEAR MODERNIZATION AND SHIFTING CONVENTIONAL BALANCE

While China and Russia have been upgrading their nuclear arsenals, the United States has been pursuing a long overdue nuclear modernization of its own—one that was designed before China’s nuclear breakout became apparent. After the Cold War, the U.S. military broadly divested itself of planning for nuclear-peer war. When the current modernization program began in 2009, policymakers still assumed that nuclear weapons were becoming less relevant to geopolitics.⁴⁷ The re-emergence of hostilities with Russia, growing tensions with China, and North Korea’s nuclear program have generated calls for a renewed emphasis on nuclear deterrence.⁴⁸ As of March 2026, the United States maintains approximately 3,700 nuclear warheads that can be delivered by ballistic missiles or aircraft; 1,770 are deployed and the United States is upgrading all three legs of the triad at a cost of \$350 billion or more.⁴⁹ Yet only the B-21 bomber is on or ahead of schedule. Shipbuilding constraints are delaying the *Columbia*-class submarine and infrastructure issues have significantly delayed and complicated the Sentinel ICBM program. Unlike Russia and China, the United States has developed few new low-yield nuclear weapons.⁵⁰

For decades, the United States believed that its conventional superiority backed by strategic nuclear capabilities was sufficient to deter or defeat aggression. That foundation is eroding. U.S. conventional forces are increasingly challenged in great powers’ near abroad due

to air defenses and long-range precision strike capabilities. The Joint Force is shrinking and support to Ukraine revealed that the defense industrial base could not rapidly surge production, nor are U.S. munitions inventories adequate for great power conflict.⁵¹ The shifting power dynamics in Europe and the Pacific have profound implications for U.S. strategy and what it will take to deter adversaries, particularly given increased cooperation between Moscow and Beijing.

DEEPENING SINO-RUSSIAN COOPERATION

China and Russia are not formal security allies, but they have a longstanding partnership that has evolved in recent years.⁵² Sharing the goals of ending American primacy and weakening the U.S.-led international order, Beijing and Moscow have increased cooperation in the military domain.⁵³ One of the most visible signs of their growing alignment has been joint Russian-Chinese military exercises, which first began in 2003.⁵⁴ Since then, Chinese and Russian forces have exercised together more than 117 times, including large-scale drills practicing multi-domain operations, such as those needed for high-intensity conflict scenarios.⁵⁵ Russian and Chinese strategic bombers also conducted 10 joint patrols in the Pacific between 2019 and 2025.⁵⁶ While these shows of force are mainly symbolic, at times, they have been used to signal Beijing and Moscow’s displeasure.⁵⁷

The Russia-China relationship has also been underpinned by direct arms sales and the transfer of dual-use technologies. Since the end of the Cold War, the PLA regularly acquired advanced Russian weapons (including air defenses), reverse-engineered them, and produced indigenous variants.⁵⁸ More recently, Moscow has helped Beijing develop capabilities that few states have by partnering with Beijing in the space domain and helping it develop a missile early warning network.⁵⁹

Although China has refrained from directly arming Russia since the 2022 invasion of Ukraine, Beijing has become the primary supplier of commercial and dual-use technologies—semiconductors, electronic components, and machine tools—as well as raw materials, such as gallium and nitrocellulose, that have sustained Russia’s defense industry.⁶⁰ China’s commercial drone supply chains have enabled Russia to manufacture drones at scale. In addition to directly employing Chinese-made commercial drones, Russian forces import fiber-optic cables, brushless motors, and lithium batteries to manufacture jam-resistant first-person-view kamikaze drones.⁶¹ They also used Chinese 4G modems, mesh-networking technology, and advanced antennas to upgrade their Shahed/Geran long-range drones.⁶²

Nevertheless, Chinese and Russian interests are not fully aligned, distrust persists, and their partnership remains transactional at its heart.⁶³ Although the relationship has deepened considerably and current levels of cooperation are likely to be sustained, neither Beijing nor Moscow is willing to circumscribe its own freedom of action by making binding security commitments to the other or assuming significant risk on the other's behalf.⁶⁴ Beijing and Moscow cooperate when their interests converge, but they are not sufficiently aligned to truly be allies.⁶⁵

Regardless of whether Sino-Russian cooperation is transactional or part of a broader geopolitical strategy, their collaboration imposes additional strain on the United States, which needs to consider both Europe and the Pacific. U.S. military force posture and readiness could be stretched thin if required to focus on these two nuclear peer adversaries simultaneously, which is addressed in the next section.

IMPLICATIONS OF TWO NUCLEAR PEERS

The prospect of facing two wars against nuclear peers forces the United States to consider the broader threat when responding to any crisis or conflict that emerges.⁶⁶ Simultaneous conflicts would force difficult allocation decisions, particularly over high-demand, low-density assets, such as tankers, air defenses, airborne early warning aircraft, bombers, and standoff missiles.

The implications of the emerging tripolar nuclear order are significant. Preparing for simultaneous conflicts is not new; it was a core assumption that drove U.S. post-Cold War force planning for decades.⁶⁷ However, in that era, the Pentagon sized its forces for two major regional contingencies against rogue states that did not possess nuclear weapons.⁶⁸ What is new today is that the United States needs to be prepared to deter and potentially defeat simultaneous nuclear-peer aggression in Europe and Asia, simultaneously waging conventional and potentially nuclear wars at regional and strategic levels.⁶⁹ From a force planning perspective, China's strategic breakout will put it on par with Russia, raising concerns about whether the U.S. strategic deterrent is sufficient.⁷⁰ The nuclear dimension is inescapable given the capabilities of the adversaries and because the United States may not be able to win two simultaneous conflicts with its conventional forces alone.⁷¹

The two war problem could take many different shapes: It might be coordinated and simultaneous attacks, sequential but overlapping attacks, or sequential aggression where the second mover strikes shortly after the first conflict is over.⁷² Simultaneous attacks, one

of the most challenging scenarios, would likely require close coordination between Russia and China, including sharing each other's war plans in advance.⁷³ Yet a fully coordinated Sino-Russian attack would require a degree of mutual trust and strategic obligation that the partnership has not demonstrated and seems unlikely.

Sequential attacks—whether they are overlapping or in quick succession—do not require such close coordination or trust. These attacks are more likely to rise opportunistically; for example, if a revisionist state launches an attack when the United States is engaged in another conflict.⁷⁴ If China or Russia starts a war and the United States intervenes to defeat the attack, the other adversary may decide that the circumstances are favorable because U.S. forces are committed elsewhere and cannot respond effectively to a second front.⁷⁵ Deterring opportunistic aggression is particularly difficult if a defender is already fighting another war: Its capabilities are concentrated on the first conflict, leaving fewer resources for the second, and it will likely be less willing to open another front before resolving the first.⁷⁶ A second conflict started shortly after the first ends could still pose considerable challenges depending on U.S. force attrition and fatigue, as well as the number of munitions expended. The United States would need to rapidly redeploy its depleted forces to another theater, raising concerns about their ability to undertake additional high-intensity operations.

As the *2022 National Defense Strategy* noted, “A near-simultaneous conflict with two nuclear-armed states would constitute an extreme circumstance,” but it is unfortunately an increasingly plausible—if not probable—one.⁷⁷ The *2026 National Defense Strategy* also stressed the risks posed by simultaneous conflicts resulting from coordinated or opportunistic aggression by two or more adversaries.⁷⁸ Russia under Putin has proven to be very accepting of risk, while China has acted increasingly assertive in the Pacific. Both states have overt revisionist claims. As both nuclear powers have secure second-strike capabilities, they may think they can engage in aggression—including conventional conflict—assuming that their nuclear arsenals will deter the most escalatory responses.⁷⁹

If either initiates a limited war, the risks of nuclear use grow. A belligerent is likely to issue nuclear threats early in an effort to deter outside intervention, as Russia has done in Ukraine. Any great power conflict is likely to become protracted in part because nuclear capabilities restrain each side and in part because of these states' latent power, raising difficult questions about war termination.⁸⁰ The most likely nuclear scenario is not a bolt from the blue attack or a full-scale strategic exchange,

but rather limited use as a coercive tool in a regional war: A low-yield weapon delivered by a precise missile to compel an adversary to negotiate, whether the user is winning or losing.⁸¹ Under such conditions, the risk of inadvertent or accidental escalation is also ever-present.⁸²

To prepare for the 2NP threat, the U.S. government must prioritize modernizing its nuclear forces and posture, demonstrating its resolve while managing escalation risks. To assist in this effort, the CNAS Defense team created a framework that allows decision-makers to consider possible 2NP scenarios through a guided analytic effort, which is described in the following section.

The 2NP Scenario Framework

To structure analysis of the 2NP challenge, the CNAS Defense Program constructed a framework organized around four variables to define how a two-front great power war could unfold.

The first variable is the **degree of collaboration** between China and Russia which dictates whether there are simultaneous or sequential attacks. At one end of the spectrum, Beijing and Moscow could engage in advance planning to coordinate their operations and synchronize the timing of their attacks. This level of cooperation would likely extend to intelligence sharing, logistics support, and potentially even coordinated nuclear signaling. At the other end, the two great powers may act independently without knowledge of the other's plan, objectives, or timeline. The first aggressor's attack creates an opening for the second, who may decide to seize the opportunity to pursue its own goals.

The second variable is the **order of aggression**: which adversary moves first. Multiple U.S. defense strategies have prioritized the Pacific, but the United States could find itself compelled to respond to a Russian attack first, limiting its options for countering Chinese aggression.

The third variable is the **temporal relationship between the two conflicts**. Three broad patterns are possible. In a rapid exploitation scenario, the second adversary attacks shortly after the first war begins, betting that the United States will be overwhelmed and unable to respond effectively on two fronts. Alternatively, the second adversary may take a "wait-and-see" approach, watching how the first conflict develops before deciding whether a window of opportunity exists. If the United States beats the first attacker, it could pivot to deter or defeat the second mover. Conversely, if American forces suffer significant losses or the first war becomes protracted, the second mover faces a weakened and distracted United States. Finally, the second adversary may wait until the conflict is over and both sides begin to

demobilize, gambling that neither the U.S. government nor the American public has the appetite for another war. Even if the political will exists, the U.S. military would have fewer available forces and would need time to reconstitute readiness and weapons stockpiles.

The fourth variable is the **range of conflict actions available to each adversary**, spanning both the conventional and nuclear spectrums (See Table 2). Conventional actions range from low-level daily gray zone harassment to global war, while nuclear actions range from verbal signals up to general nuclear war. Critically, conventional and nuclear actions do not need to escalate in lockstep.

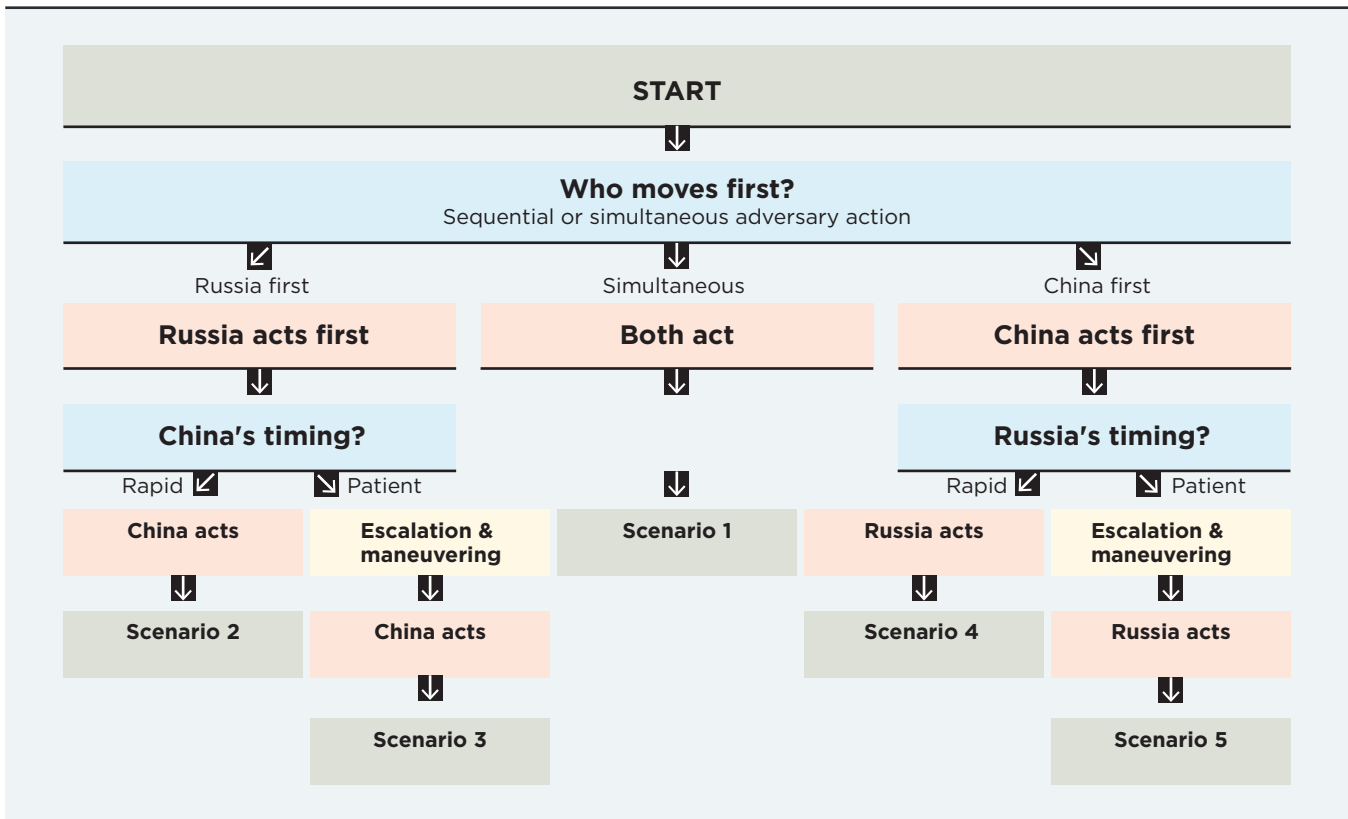
The actions that an adversary takes are likely to be shaped by its stakes in the conflict. A gray zone territorial grab—seizing a feature in the South China Sea or a border town like Narva—combined with nuclear signaling represents a low stakes gamble. Because the aggressor has not committed significant forces or political capital, it is easier to back down if confronted. In contrast, a Chinese attack on Taiwan would be a higher stakes gamble tied to regime legitimacy in which the costs of failure make escalation more likely. In short, large-scale aggression where the stakes are higher may be harder to deter, even if the initial move is opportunistic.

These four variables are visualized as a decision tree in Table 1 to form the main contours of 2NP scenarios. This figure only depicts two adversary actions but could be easily expanded to detail additional moves and countermoves.

In its most basic form, the framework produces five notional 2NP conflict scenarios.

- Scenario 1: A simultaneous 2NP conflict where both adversaries take actions against the United States at the same time.
- Scenario 2: Russia acts against the United States first; China closely follows.
- Scenario 3: Russia acts against the United States first; China exercises strategic patience. The interaction between Russia and the United States would escalate and/or protract while China considers its options before taking overt action.
- Scenario 4: China acts against the United States first; Russia closely follows.
- Scenario 5: China acts against the United States first; Russia exercises strategic patience. The interaction between China and the United States would escalate and/or protract while Russia considers its options before taking overt action.

Table 1: Scenario Decision Tree



CONSIDERING THE BREADTH OF THE 2NP SCENARIO SPACE

The conflict matrix in Appendix 2, Table 3 depicts a universe of dual crises and conflicts of varying levels of intensity between the United States and its 2NP adversaries, consistent with the project's objective to expand how 2NP scenarios are considered. Analysis of the 2NP challenge is at an early stage and there is a risk of focusing on high-end conflict scenarios: two simultaneous and coordinated large-scale attacks that the United States cannot win conventionally. Similarly, very low levels of conventional aggression were deemed to be inconsequential and not interesting during the workshop. Workshop participants identified middling levels of conventional aggression with various levels of nuclear actions as an underexplored and interesting space. Such a scenario would begin with limited conventional military and nuclear actions between the conflict actors but not necessarily progress to high-intensity warfighting.

Exploring the 2NP challenge Through the TTX⁸³

The TTX began with China declaring an air and maritime exclusion zone over the eastern portion of the Taiwan Strait. Simultaneously, China mined Taiwanese ports, conducted massive cyberattacks against civilian and military infrastructure, and issued a thinly veiled nuclear threat to outside powers not to interfere. Concurrently, in response to a NATO naval exercise with U.S. participation in the High North, Russia sortied a surface action group into the Barents Sea and conducted a snap exercise of its nuclear forces.

In the second move, two weeks into the blockade, China significantly escalated. A massive American effort to resupply Taiwan by air and sea prompted a large-scale joint firepower campaign against the island, drone swarms to overwhelm defenses, and a special operations raid that seized the Penghu Islands as a potential launchpad for a full-scale invasion. To head off further U.S. escalation, China issued an ultimatum demanding all American air and naval assets leave the vicinity of Taiwan within 96 hours. Concurrent with this ultimatum, China detonated a 5 kt nuclear weapon over Taiping Island in the South China Sea.

In Europe, Russia declared a “special policing operation” and deployed military personnel to Barentsburg in the Svalbard archipelago, ostensibly in response to a deadly explosion that killed two dozen Russian mine-workers.⁸⁴ It deployed antiship and anti-aircraft systems to Svalbard, sortied several nuclear-armed submarines, and dispersed its arsenal of road-mobile SS-27 ballistic missiles into firing positions across Russian territory.

The full scenario is provided in Appendix 1. The following sections discuss the TTX’s key insights.

Protracted Lower-Level Conflicts Constrain U.S. Response Options

The TTX scenario was designed to present the United States with a low level of threat in each theater, forcing Blue to make decisions under uncertainty about how far either crisis might escalate. Red’s strategy sought to prevent American forces from reinforcing either theater while limiting incentives for U.S. escalation. In Europe, Russia’s seizure of Svalbard was significant but did not involve direct military engagements between Russian and NATO forces. In the Pacific, China’s campaign against Taiwan and use of a low-yield nuclear weapon demonstrated willingness to escalate but stopped short of directly targeting American or allied forces. Both situations presented Blue with the same dilemma: Deterrence had failed and credible threats of further escalation existed, yet the range of options available to roll back adversary gains and prevent further escalation was narrow. By pursuing steady, calibrated escalation, Russia and China constrained U.S. response options without triggering the kind of clear-cut aggression that would have simplified American decision-making.

A related but distinct question is whether gray zone aggression alone would consume enough U.S. resources to prevent the United States from defeating a second adversary in a conventional war. The TTX did not test this directly, but this remains an area for further exploration.

Deferring the Secondary Theater: Allied Constraints

Though allies were not directly represented in the TTX, their role was a salient point of discussion. Blue players sought to treat the Russian seizure of Svalbard as a secondary priority, deferring a full response while they focused on the more demanding blockade of Taiwan. The seizure of Svalbard was limited in scope, and other NATO countries might have been able to roll it back on their own. Yet it is not clear that European allies would have accepted a delayed American response. Even in a limited contingency, NATO allies would likely still need

U.S. support for high-demand, low-density conventional assets, plus the backing of the American strategic deterrent, particularly given Russia’s nuclear saber-rattling.

In response to both Russian and Chinese actions, Blue players pursued greater coordination with their regional partners. The conflict in Europe remained more limited than the one in the Pacific, and Blue players assessed that the European states were more capable of responding to Russian aggression than American allies and partners in the Pacific under threat from China. While this did shape Blue players’ decisions to prioritize military reinforcements to the Pacific, it left the United States unable to signal significant commitment to its European allies simultaneous to its escalation in the Pacific.

In the Pacific, the imperative to distribute American forces across bases in the region and to use those bases for operations against China highlighted the issue of base access, restrictions on offensive operations, and allied contributions to military operations against China. China’s ability to inflict costs on American allies and partners hosting American forces using drones and other one-way attack platforms raised questions about whether some countries would restrict cooperation with the American military during a 2NP scenario.

In short, sequencing responses across theaters may be operationally desirable, but allied demands for reassurance and a prompt response, coupled with access, basing, and overflight restrictions, could make it politically untenable.

American Nuclear Signaling and Credibility

Signaling capability and resolve against two adversaries simultaneously stretched U.S. nuclear capabilities and revealed a gap between the military actions Blue took and the strategic messages those actions were intended to convey. This finding points to a need for more theater-level nuclear capabilities, more routine training and exercises for the forces that execute nuclear operations, and increased awareness among the senior officials who direct these forces.

Throughout the TTX, Blue players attempted to deter China from attacking Taiwan and Russia from aggressing in the Arctic through nuclear signaling. In Europe, more aggressive actions by allied forces could have demonstrated to Russia that escalation would carry conventional military costs despite a limited American footprint in the region.⁸⁵ Yet Europe still relies heavily on the American strategic deterrent and U.S.-led theater dual-capable aircraft. During the TTX, in the Pacific, the absence of theater-deployed, lower-yield nuclear weapons narrowed the range of options available to deter China. Blue

forward-deployed strategic bombers to Australia and Alaska, but Red anticipated these moves and did not find them threatening enough to alter its calculus.

Red assessed that Blue's nuclear signaling throughout the TTX was insufficient to convey a credible willingness to escalate to nuclear use and these actions had limited effect on their decision-making. Furthermore, strategic bombers were a very stressed asset needed for conventional strike and nuclear signaling missions. Because bombers were the only visible, deployable nuclear capability in theater, they were overextended, highlighting the need for additional bombers and visible theater-level nuclear options in the Pacific to reinforce deterrence.

A related disconnect emerged between signals conveyed through military actions—such as readying nuclear delivery platforms—and those conveyed through strategic communications by senior leaders, such as public statements or diplomatic engagement. Military nuclear signals were not accompanied by direct messaging from senior Blue leaders and their intent was not clearly received by either adversary. This may have been an artifact of the game design, which limited communication between Red and Blue, but it underscores the importance of pairing military signals with explicit strategic communications, especially when the United States must send discrete messages to two adversaries at the same time. The United States has fallen out of the practice of explicit nuclear signaling. To remain credible, the U.S. military should routinely exercise these operations, and senior U.S. officials should participate in TTXs and other events that build familiarity with the strengths, weaknesses, and risks of different signaling options.

The Hope for Cross-Theater Credibility

As part of Blue's decision to prioritize defeating the blockade of Taiwan, deferring its full response to the seizure of Svalbard, some Blue players assumed that their actions in the Pacific were reinforcing the credibility of American threats in Europe.⁸⁶ Red did not share this assessment. While the United States was responding forcefully to China's detonation of a nuclear weapon in the South China Sea, Red was not convinced the United States would emerge from an escalating conflict in the Pacific prepared to prevail in Europe as well. The conflict over Svalbard remained sufficiently limited such that cross-theater credibility may have held, but that would have depended on escalation dynamics the TTX did not consider. The concept that decisive action in one theater bolsters deterrence in another echoes domino theory logic and warrants further examination.

Furthermore, while nuclear signals in one theater

reinforced deterrence locally, they simultaneously reduced the capabilities available in the other theater. With a limited conventional and nuclear force structure, every deployment decision involved a trade-off: Assets committed to signal resolve in the Pacific weakened the American military's potential posture in Europe, and vice versa.

Homeland Defense and Nuclear Deterrence Compete for Limited Assets

As the conflict protracted, homeland defense and nuclear deterrence missions consumed assets that were also needed for conventional operations in both theaters. In the Arctic, Russia's nuclear test immediately triggered an enhanced homeland defense posture, with NORTHCOM requiring tankers and airborne early warning aircraft to support the response. This effectively opened a third theater of operations. In the Pacific, Blue's deployment of bombers to Alaska created a similar requirement: Those assets needed protection from potential Chinese submarine-launched cruise missiles or conventionally armed ballistic missiles, drawing additional air defense resources away from offensive operations.

At the same time, STRATCOM needed to generate assets for the nuclear deterrence mission, which required reserving tankers and bombers. The result was a three-way competition for a limited pool of very high-demand aircraft—tankers, bombers, and airborne early warning aircraft—among conventional strike, homeland defense, and nuclear deterrence missions. The existing force structure was not adequate to meet all these demands simultaneously. Because physical forces take time to move from one theater to another, the Pentagon should explore how to employ inherently global capabilities, such as space and cyber weapons, to bolster deterrence and warfighting.

The Difficulty of Shifting Forces Between Theaters

Red players doubted the ability of the United States to swing meaningful numbers of forces between theaters quickly enough to matter. Once Blue committed to executing a war plan and deploying forces to the Pacific, that decision was difficult to reverse, sparking comparisons to the mobilization timetables of World War I, where deployment schedules, once set in motion, developed a momentum of their own. Red's cyberattacks against military transportation networks worsened this problem by corrupting the data Blue needed to redirect forces with confidence.

The demand on the tankers for homeland defense

and nuclear deterrence would further limit the United States' ability to rapidly airlift light forces between theaters. Rapidly redeploying forces from one theater to another may be feasible if the requirement is small and predominantly air and maritime, but even naval forces would need weeks or months to transit from the Pacific to the Arctic.⁸⁷ In short, force-swing assumptions that underpin a sequential response strategy may not survive contact with the realities of distance, time, and degraded information.

Cooperation Is Not Required to Create Deterrence Challenges

Red players representing Russia and China refrained from significant cooperation or coordination. Rather, they pursued limited, ad hoc cooperation when the costs were minimal. The Russia players, for instance, continued relatively low-level gray zone attacks against Svalbard largely of their own volition, but had the added benefit of fixing U.S. forces in Europe. Both adversaries supported low-cost assistance, such as unrestricted over-flight along border regions, but neither side was willing to share high-value intelligence, conduct joint operations, or undertake military operations on the behalf of the other.

The converse is also possible. An adversary may reduce tensions and gray zone activity in its region to encourage the United States to shift forces elsewhere, creating a window of opportunity. While not explored in this TTX, this strategy could have been what China was pursuing toward Taiwan in the early weeks of the 2026 U.S. war with Iran.⁸⁸ Both dynamics—opportunistic pressure and strategic restraint—can create dilemmas for the United States without requiring formal coordination between the two adversaries. This observation supports the decision to bracket out formal cooperation between the 2NP adversaries in the development of the scenario framework.

Key Findings and Recommendations

Finding

Russia and China do not need to collaborate to create serious deterrence challenges for the United States. In the TTX, Russia and China pursued independent, opportunistic actions that collectively strained U.S. forces without requiring coordination, joint operations, or shared intelligence.

Recommendations

- The Department of War (DoW), Office of the Undersecretary of War for Policy (OSW-P), DTRA, Joint Staff J-8, U.S. Strategic Command (STRATCOM), Global Strike Command, U.S. European Command, and U.S. Pacific Command should apply the scenario framework to generate additional sequential 2NP scenarios and explore these through structured analysis and TTXs. The baseline scenarios created for this project provide a starting point, but additional variants are needed to test different combinations of adversary actions, timing, and escalation levels.
- The DoW should resist the impulse to focus exclusively on the most stressing scenario of simultaneous, high-intensity conflicts requiring deep Sino-Russian coordination. Opportunistic, sequential aggression is more likely because it does not require deep trust and coordination between Beijing and Moscow and, as this analysis demonstrates, can impose substantial costs on the United States even without formal cooperation between the two adversaries.

Finding

Protracted, lower-level simultaneous conflicts can pose serious challenges and are more likely than concurrent, high-intensity wars. During the TTX, each 2NP adversary pursued calibrated, steady escalation below the threshold of direct military engagement with the United States. This included gradually expanding blockades and engaging in escalatory military harassment without clear-cut aggression—constraining U.S. response options and complicating American decision-making. The narrow range of options available to roll back adversary gains while preventing further escalation left U.S. players in a persistent strategic bind.

Recommendations

- The DoW should challenge assumptions that great power crises and moderate intensity conflicts will be short and decisive. The nuclear capabilities of all parties create strong incentives for escalation management that increases the likelihood of protracted conflict. The United States must plan for sustained operations across two theaters simultaneously.
- OSW-P, the Joint Staff J-4 and the U.S. Transportation Command should assess the ability to swing forces between theaters under realistic conditions, including degraded information environments, cyberattacks on logistics networks, and competing demands for key assets from homeland defense and nuclear deterrence missions.
- OSW-P should examine how space and cyber capabilities—which are less constrained by distance—can bolster deterrence and warfighting in two theaters simultaneously to compensate for conventional weapons systems that take time to deploy.

Finding

Nuclear signaling is particularly difficult when facing two separate adversaries, and the United States currently lacks the tools and practice to credibly communicate resolve across the spectrum of conflict in both theaters at once. In the TTX, Red assessed that Blue's nuclear signaling was insufficient to alter its decision-making. Strategic bombers were the only visible, deployable nuclear capability in the Pacific and were overextended between conventional strike and nuclear signaling missions. Military actions to ready nuclear delivery platforms were not paired with direct strategic communications from senior leaders, and their intent was not clearly received by either adversary.

Recommendations

- The DoW should explore options for acquiring theater-level nuclear forces, such as ground-based missiles, tactical aircraft, and surface ships, which can be deployed forward, particularly to the Pacific, and that are visible enough to be useful for signaling. The current reliance on strategic bombers for both conventional operations and nuclear deterrence would likely overstretch the bomber and tanker force.
- OSW, STRATCOM, and the Air Force could increase stealth bomber procurement to expand the U.S.

military's capacity to simultaneously conduct conventional deterrence and warfighting, and nuclear signaling and operations against two peer adversaries.

- The Joint Staff and the services should increase training and exercising of U.S. forces for nuclear operations so that they can be employed quickly and effectively to signal resolve and demonstrate resilience on a possible nuclear battlefield. The U.S. military has fallen out of practice with explicit nuclear signaling, and this gap was evident throughout the exercise.
- DTRA could conduct TTXs with senior leaders that build familiarity with the strengths, weaknesses, and risks of different signaling options and require them to tightly link strategic communications to military actions.

Finding

Homeland defense and nuclear deterrence missions compete with conventional operations for the same limited, high-demand assets. As the 2NP scenario escalated, U.S. Northern Command, STRATCOM, and the theater combatant commands competed for tankers, bombers, and airborne early warning aircraft. The existing force structure was not adequate to meet these mission demands simultaneously, and every deployment decision in one theater directly weakened posture in the other.

Recommendation

- OSW-P and the Joint Staff should evaluate the adequacy of the Joint Force's high-demand, low-density assets against the requirements of simultaneous 2NP operations, including concurrent homeland defense, nuclear deterrence, and theater conventional missions and identify specific shortfalls and investment priorities.

Finding

The role of allies in 2NP scenarios requires more exploration: What will be needed to reassure them, what capabilities can they contribute, and would they accept a sequenced U.S. response that prioritizes one theater over the other? In the TTX, Blue players sought to defer a full response to Russian aggression in Europe while focusing on the Pacific, but it was unclear that European allies would be able to hold their own or would accept delayed

American engagement even in a limited contingency. This could prompt them to make additional investments in conventional capabilities, which would be welcome, but could also spur undesirable nuclear proliferation. Maintaining strong cooperation between American allies and partners in 2NP scenarios sends a powerful deterrent signal and highlights the relative isolation of Russia and China compared to the coalition arrayed against them.

Recommendations

- OSW-P should initiate structured consultations with Pacific and NATO allies on 2NP contingencies, focusing on what capabilities they could contribute, what assurances they would require, why this level of preparation may be necessary, and what allies can do to improve their ability to defend with limited U.S. assistance. These discussions should proceed at the working level for discussions of specific capabilities, which can be reinforced by strategic-level discussions for issues dealing with assurance.
- When possible, the DoW should incorporate allies into future 2NP tabletop exercises to gain direct insight into their perspectives, particularly on escalation management, base access and restrictions on offensive operations, and the demands they would place on the United States for extended deterrence guarantees.
- The Joint Staff and DTRA should conduct additional analysis on the issue of cross-theater credibility to include running TTXs focused on allies' and adversaries' perspectives and reactions to this approach. Adversaries and allies alike must believe that the United States has not only the capability, but also the will to uphold its extended deterrence commitments. Strong U.S. action to defend an ally or partner in one theater could be read as a signal of broader American resolve to defend allies, but that inference is far from assured.

Appendix 1: TTX Scenario

Move 1

The Road to War

In the Pacific, China has grown bolder and stronger. China's military, working in concert with its coast guard and shadowy maritime militia, now command the air and sea inside the First Island Chain. Beijing has established a steady drumbeat of provocative military exercises against Taiwan proper that have extended into the Spratly Islands, including Taiping. These actions include live-fire drills that have heightened fears of conflict. Six months ago, China launched a so-called "military policing operation," ordering its coast guard to stop and inspect ships to or from Taiwan on the grounds of searching for illegal goods. The United States and its allies were quick to denounce China's actions, but their response amounted to little more than words. After six days of selective inspections, Beijing ended its quarantine of Taiwan, claiming that it had ended the illegal smuggling. Behind closed doors, U.S. officials debated how to push back forcefully enough to deter further Chinese aggression without tipping the situation into a full-blown conflict. The United States found its options limited by persistent readiness issues and ongoing operations in the Western Hemisphere. While the conflict with Iran ended in 2026, after nearly four years of successive operations in the Middle East, American munitions inventories remain limited and the availability of key assets like ships and aircraft has not yet recovered.

The conflict between Russia and Ukraine is frozen. Despite heavy losses, Russia's military has successfully reconstituted much of its conventional forces while continuing to modernize its nuclear forces. The primary security concern in Europe has shifted to the Arctic. Debates over mineral rights, economic zones, and transportation corridors in the Arctic have inflamed tensions between NATO allies and Russia. With the United States increasingly focused on the Western Hemisphere, European forces have taken on a greater role in conventional deterrence and day-to-day competition. In recent years, the UK-led Joint Expeditionary Force (JEF) has emerged as the principal Western multilateral organization operating in the High North, creating a more persistent presence through a sustained increase in exercise tempo. The United States occasionally participates in JEF exercises, in what is dubbed the "JEF+" (the Joint Expeditionary Force plus the United States).

America's military footprint in Europe has decreased over the last five years—as it has across the globe—but despite its reduced size, America's forward deployed forces remain actively engaged, albeit with reduced readiness and overall capability available to it in forward theaters. Russia was alarmed by the proximity of NATO forces in the High North after the most recent JEF+ exercise and has signaled that it views the actions of the JEF+ as a provocation.

The emergence of a two nuclear peer threat in two theaters has strained U.S. forces, pushing senior leaders to confront hard decisions about tradeoffs that could impact global force posture. As China and Russia continue destabilizing actions in their own backyards, concerns persist that if the two nations engage in even limited coordination, the threats to the United States and its allies and partners could be far more serious, straining a force structure designed for one major conflict at a time.

China

Since late January, China's maritime militia has increased the scale and scope of its actions in the Taiwan Strait and the South China Sea. A large fleet of civilian fishing vessels linked to China's gray zone provocations in the past has challenged maritime exclusion zones and fisheries claimed by Vietnam, Taiwan, and the Philippines. In February, the fishing fleet surrounded Taiping Island for two weeks under the close supervision of the China Coast Guard (CCG). The CCG became increasingly brazen in its actions surrounding Taiping Island. Its vessels nearly collided with two U.S. Navy destroyers executing freedom of navigation operations (FONOPs) in the area. People's Liberation Army Navy (PLAN) ships did not interfere with FONOP actions, but their presence nearby the CCG ships demonstrated that China was increasingly challenging American actions in the South China Sea. A second fleet of fishing vessels has been harassing Taiwanese ships along Taiwan's east coast since late February. Amidst these tensions, China's "information warriors" have flooded the internet with messaging calling for the forced reunification of Taiwan with China, stoking nationalist support for military action against the island. Since last week, Taiwan has reported an increase in the number of cyber intrusions it has detected.

Two days ago, China executed a large-scale live-fire naval exercise that involved forces on all sides of Taiwan. That exercise coincided with an announcement from President Xi Jinping that China was declaring an air and maritime exclusion zone and was closing the eastern

part of the Taiwan Strait. China quickly deployed additional naval, coast guard, and maritime militia vessels to reinforce the assets already staged as part of its live-fire exercise. Taiwanese military officials announced today that Chinese submarines had mined all of Taiwan's western ports and harbors. To reinforce the seriousness of China's blockade, several long-range rockets and short-range ballistic missiles were fired from the Chinese mainland and fell just short of the island without causing any damage.

This morning, Taiwanese citizens reported that they had lost internet access. Shortly thereafter, most outside contact with the island was lost. American officials announced that the PLA had conducted a massive attack on Taiwan's military and civilian communications systems—cutting its internet cables and using cyberattacks against civilian cellular and satellite communications networks, as well as severely degrading Taiwan's military command and control infrastructure. In a separate press conference, the Pentagon stated it had evidence that China was actively jamming Taiwan's space-based communications and had received reports from civilian aviation in the region that GPS signals were no longer accessible.

Also this morning, President Xi made his first public remarks on the situation in a televised speech. He declared that the dispute over Taiwan was a purely internal matter and warned other countries to stay out. His message was that China has arrived as a great power and possessed every tool available, including “the ultimate one.” Analysts quickly pointed out that this unmistakable reference to China's fully modernized nuclear arsenal was a sharp escalation in Beijing's rhetoric.

This afternoon, Japanese and American forces tracked a flight of Chinese H-6N nuclear bombers as they crossed into the air defense identification zones of Taiwan and Japan.

Russia

In the last year, Russia has increasingly targeted Russian populations in NATO countries with nationalist messages of self-determination. These messages have been particularly impactful in regions where Russia claims historical ties. Perhaps nowhere have they been more meaningful than the Svalbard archipelago, where Russians outnumber Norwegians and Russia's mining industry dominates the region's economy. Russia has long

claimed that Norwegian authorities have mistreated the Russian workers living on Svalbard, but recently those tensions have grown acute. With NATO's focus on the Arctic becoming greater, Norwegian military activities on and around Svalbard have been a point of contention with the Russians, who accuse Norway of militarizing the archipelago in violation of the longstanding Svalbard Treaty. In response, Russia has dispatched sizeable fishing fleets from its home waters to areas around Svalbard to challenge the territorial waters of Norway. In December of last year, Norwegian mining officials announced that they had discovered considerable hydrocarbon resources beneath Svalbard's continental shelf and were beginning to implement plans for a major extraction project. Russia immediately denounced these plans as illegal. Throughout January, the companies thought to be involved in Norway's Svalbard extraction project experienced repeated equipment failures, which raised suspicion of sabotage. Their actions offshore and on Svalbard itself were frequently monitored by small drones, which Norwegian officials have privately confirmed originate from nearby Russian vessels.

Currently, the JEF+ is conducting exercise Northern Shield, which simulates multidomain operations to repel a potential attack on Norwegian territory. While much of the U.S. military is looking toward the crisis in the Taiwan Strait, it has committed a small contingent of air and marine forces to the exercise, mainly from its forces located in Europe. The exercise is centered on Norway's extreme northern territory and in the Bear Gap maritime corridor between Norway and Svalbard and features air-defense and sea-denial actions against a simulated Russian invasion force. Russia has denounced plans for the exercise since they were announced last summer. One week into the exercise and two weeks following the initiation of China's blockade around Taiwan, Russia sortied a surface action group from its Northern Fleet into the Barents Sea, positioning it near the exercise areas in the High North. Separate from the Russian Navy's surface action group, Russia conducted a snap exercise—Molniya (lightning)—where it test-fired a R-29RMU Sineva ballistic missile from a ballistic missile submarine (SSBN) in the Barents Sea. Additionally, a flight of Tu-95 Bear bombers launched a pair of KH-102 cruise missiles and KH-47M2 air-launched ballistic missiles in the vicinity of Svalbard. These actions coincided with the JEF+ exercise and demonstrated what Russia publicly claimed was its “escalation dominance.”

Move 2

United States

In the wake of China's blockade operation, Taiwan made it clear that it would not capitulate to Chinese aggression and appealed to the international community to stand alongside it against what it called grossly illegal provocations by Beijing. The president of the United States determined that the best course of action would be to attempt to resupply Taiwan and demonstrate military resolve by using naval forces to escort maritime shipping into Taiwanese ports. It also established an air bridge to rapidly deliver a build-up of military supplies to support Taiwan's defense forces.

American leaders remained focused primarily on the growing crisis in the Pacific but did not lose sight of Russia's meddling in the High North. The president stated that American participation in the ongoing JEF+ exercise in the Arctic would continue. Additional P-8 maritime surveillance and antisubmarine warfare aircraft were deployed to Norway and Sweden to participate in the exercise. The president has also directed the recently redesignated 1st Marine Littoral Regiment (MLR) to prepare for possible deployment to Norway from its home base at Camp Pendleton. The 1st MLR recently conducted exercises alongside Finnish forces in the High North and is a designated rapid deployment force for the region. However, due to the strain on U.S. air and sea lift from the ongoing crisis in Taiwan, it is uncertain how fast the 1st MLR could deploy and what equipment it would arrive with once deployed to Norway.

China

Three weeks into its blockade of Taiwan, China opts to significantly escalate its military actions against the island. After several weeks of successful efforts by American forces to resupply Taiwan, China's frustrations with the ongoing interference had reached the limit. On the morning of the 21st day of China's operation, it initiated the large-scale joint firepower campaign that Taiwanese and American leaders had been worrying about for over a decade. China launched hundreds of rockets and missiles from its land-based forces targeting Taiwanese ports, airports, military targets, and energy infrastructure. These strikes were complemented by massive swarms of drones and other "cheap mass" platforms deployed by the large naval armada arrayed around Taiwan's coastline. Taiwan's long-range air defenses were overwhelmed and eliminated, and a significant portion of its infrastructure was destroyed. Its response

was further impeded by heavily degraded military communications, leading Taiwanese defenders to undertake less coordinated actions. The joint firepower campaign was closely followed by a Chinese special operations raid on the Penghu Islands, just off the coast of mainland Taiwan. The airborne and amphibious assault on the Penghus was a success and China gained full control of the islands, providing a strongpoint for it to enforce its blockade and potentially offering a launchpad for a full-scale invasion.

To deter outside intervention, President Xi made a public threat to any outside power: "China will take all means necessary to ensure that concerns in the Taiwan Strait remain an internal matter." The Chinese military informed the United States that any air or naval assets remaining in the vicinity of the Taiwan Strait after 96 hours would be targeted. Almost simultaneously, China demonstrated just how serious it was. Initial reports from the region indicated a massive explosion in the South China Sea. American officials have since confirmed that a 5 kt nuclear weapon was detonated over Taiping Island, a rocky outpost in the South China Sea claimed by Taiwan, Vietnam, and the Philippines. The island is administered by Taiwan and hosts a rotational presence of Taiwanese air, naval, and marine forces. There are no permanent civilian residents on the island. Taiwan has not confirmed how many of its citizens were on the island when the nuclear attack occurred.

Russia

Two days after China's full-scale escalation against Taiwan, there was a deadly explosion in Barentsburg, Svalbard that killed two dozen Russian workers. Russia immediately condemned the event as an attack against the Russian population on the island orchestrated by NATO. Moscow declared a "special policing operation" to immediately deploy law enforcement personnel to protect the Russian population in Barentsburg. The next day, several planes landed on Svalbard carrying the Russian personnel, despite Russian claims that they were law enforcement tasked with protecting the Russian population. NATO intelligence concludes that the planes delivered members of Russia's 200th Separate Motorized Brigade and 61st Naval Infantry Brigade—Russia's premier Arctic warfighting troops. Satellite imagery shows the Russian forces have also deployed several missile batteries, including S-400 anti-aircraft systems and Bastion-P coastal defense cruise missiles. The Russian troops quickly moved to commander control of the island, moving outward from the Russian community in Barentsburg to seize control of the Norwegian

community in Longyearbyen. Norwegian intelligence has informed the United States that without any local resistance, Russia has seized complete control of the Svalbard archipelago.

Satellite imagery has shown a flurry of action along Russia's northern periphery. It appears that the Russian Navy has sortied several nuclear-armed SSBNs from their homeports, likely taking up station in Russia's long-held Arctic bastion, positioned to fire submarine-launched ballistic missiles. Indicative of the worsening crisis, Russia has ratcheted tensions up even further by announcing a snap exercise of its ground-based nuclear forces, dispersing its arsenal of road-mobile SS-27 ICBMs into firing positions across the country.

Appendix 2: Framework Graphics

Table 2: Conflict actions

CONFLICT ACTIONS		
Escalation Level	Conventional Actions	Nuclear Actions
Lowest	Covert or gray zone hostilities Hacking, subversion, militia activities	Verbal nuclear signaling Statements by political and military leaders signaling willingness to employ nuclear weapons
Lower	Overt military signaling “Police” actions in nonaligned third countries, large-scale conventional exercises, joint 2NP patrols or exercises	Nuclear signaling Unscheduled movement of mobile nuclear launch platforms, nuclear exercises
Moderate	Covert military actions Hacking military infrastructure, reversible attacks on space or cyber assets	Nuclear preparations Snap deployment of SSBNs, nuclear alerts for ground and air forces
High	Limited conventional actions Blockade of aligned country, limited conventional missile attack, raid	Limited nuclear actions Theater deployment of tactical nuclear weapons, nuclear test or demonstration
Higher	Large-scale conventional actions Large scale conventional operations against allied territory	Large-scale nuclear actions Tactical battlefield nuclear employment
Highest	General war Conventional attacks on U.S. homeland	General nuclear war Tactical nuclear use against noncontiguous U.S. territory or installations

Table 3: Conflict Matrix

		2NP ADVERSARY #2 ACTIONS		
2NP ADVERSARY #1 ACTIONS		Crisis	Limited Action	Full-Scale Action
	Crisis	Simultaneous crises	Low-intensity conflict alongside a crisis	High-intensity conflict alongside a crisis
	Limited Action	Low-intensity conflict alongside a crisis	Simultaneous mid-intensity conflicts	High-intensity conflict alongside a low-intensity conflict
	Full-Scale Action	High-intensity conflict alongside a crisis	High-intensity conflict alongside a low-intensity conflict	Simultaneous high-intensity conflicts

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 83. This TTX was designed as an initial exploration of the 2NP challenge, with a particular focus on nuclear dynamics. Games are not predictive but rather indicative, and a single iteration of an exercise exploring a problem with as many permutations as this one should be viewed as producing tentative insights, not definitive conclusions. To ensure that the TTX involved two simultaneous conflicts at the desired level of intensity, the White Cell scripted the aggression, including nuclear actions. Because these escalatory moves were directed rather than chosen by the players, the authors are careful not to draw conclusions from decisions that were designed into the game. A Red team operated as a shadow cell, critiquing the scenario, developing its own plans, and providing feedback to the Blue team during the hotwash. As always, the insights from this TTX should be subjected to additional wargaming and analysis.
 84. During the exercise, the Red team expressed concerns with how these adversary actions played out. Specifically, China was unlikely to believe a nuclear weapon was necessary and Russia would not see strategic value in seizing Svalbard. In the Red team’s view, Russia would want to fix U.S. forces but knew that it would not be sustainable to hold onto the presence and did not believe the island was worth it, which diminished the value of resources posited in the scenario.
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86. Alternatively, some scholars argue that credibility does not matter as much as a state's power and stakes in conflict. See Daryl Press, *Calculating Credibility: How Leaders Assess Military Threats* (Cornell University Press, 2005).
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