

## A Tripolar Nuclear World: Challenges to Strategic Stability

Robert Litwak

To cite this article: Robert Litwak (2023) A Tripolar Nuclear World: Challenges to Strategic Stability, *The Washington Quarterly*, 46:4, 143-158, DOI: [10.1080/0163660X.2023.2286790](https://doi.org/10.1080/0163660X.2023.2286790)

To link to this article: <https://doi.org/10.1080/0163660X.2023.2286790>



Published online: 19 Dec 2023.



Submit your article to this journal [↗](#)



View related articles [↗](#)



View Crossmark data [↗](#)

---

# A Tripolar Nuclear World: Challenges to Strategic Stability

“And then there were three,” declared the *Economist* magazine in late 2022, in response to China’s expansion of its strategic nuclear forces with the apparent goal of achieving parity with the United States and Russia.<sup>1</sup> The Biden administration’s 2022 *Nuclear Posture Review* similarly cautioned that “by the 2030s the United States will, for the first time in its history, face two major nuclear powers as strategic competitors and potential adversaries.”<sup>2</sup> Thus, nuclear bipolarity of the Cold War and post-Cold War eras is being supplanted by emergent nuclear tripolarity. China is emerging as a nuclear peer amidst a confluence of three destabilizing developments.

First, the treaty-based arms control architecture erected in the three decades between 1970 and 2000 (of which China was never a party) has been dismantled to the point of near-collapse in the two decades since. That negotiated nuclear order, which placed constraints on offensive and defensive capabilities, managed competition between the superpowers. The New Strategic Arms Reduction Treaty (START), linear successor to the original Strategic Arms Limitation Talks (SALT) agreement, was extended in 2021 by US President Joe Biden and Russian President Vladimir Putin for an additional five years—and then suspended by Putin in 2023 at the one-year mark of the Ukraine War. For the time being, Russia has stated that it will continue to abide by the agreement’s numerical constraints, but whether Putin’s suspension augurs outright abrogation is uncertain. Meanwhile, all three powers are engaged in

---

Robert S. Litwak is Senior Vice President and Director of International Security Studies at the Woodrow Wilson International Center for Scholars. He can be reached at [Robert.Litwak@wilsoncenter.org](mailto:Robert.Litwak@wilsoncenter.org). This article draws on the author’s *Tripolar Instability: Nuclear Competition Among the United States, Russia, and China* (Washington, DC: Wilson Center, 2023).

---

© 2023 The Elliott School of International Affairs  
*The Washington Quarterly* • 46:4 pp. 143–158  
<https://doi.org/10.1080/0163660X.2023.2286790>

robust nuclear modernization programs in what is now unconstrained competition.

Second, great-power competition has extended into the new domains of cyber and outer space, while new technologies—like artificial intelligence and hypersonic delivery systems—threaten new dislocations. These novel domains and technologies are difficult to constrain through traditional arms control.

And third, most fundamentally, the international milieu is toxic. For the United States, the two-peer challenge is arising against the backdrop of Russia's brutal war in Ukraine, which threatens the international order. Moreover, Putin's provocative nuclear saber-rattling has elevated the risk of Russian nuclear use to a level not seen since the most fraught moments of the Cold War. CIA Director William J. Burns has warned, "Given the potential desperation of President Putin and the Russian leadership, given the setbacks that they've faced so far, militarily, none of us can take lightly the threat posed by a potential resort to tactical nuclear weapons or low-yield nuclear weapons."<sup>3</sup> Simultaneously, in the Indo-Pacific, the United States faces a potential crisis with China over Taiwan.

This new era of geostrategic competition has also recast two traditional risks of the bipolar Cold War era. The first recast risk is the relationship between nuclear deterrence and the propensity for conflict at lower levels on the continuum of military force. After both the United States and the Soviet Union acquired thermonuclear weapons in the 1950s, British strategist B.H. Liddell Hart speculated, "To the extent that the H-bomb reduces the likelihood of full-scale war, it increases the possibility of limited war pursued by widespread local aggression."<sup>4</sup> Policy analysts would later refer to this as the "stability-instability paradox"—meaning that strategic stability at the nuclear level could generate instability by encouraging rival powers to pursue tactical gains through non-nuclear means in regions peripheral to the central conflict in what was then called the "Third World." But even with the ideological overlay of the Cold War, these stakes were less than vital, and the conflicts typically involved one superpower against the proxy forces of the other (e.g., Soviet backing of North Vietnam during the Vietnam War, US support for the Afghan *mujahideen* under the Carter and Reagan administrations). These constraints significantly mitigated the risks of escalation. By contrast, in the emergent tripolar system, potential flashpoints between nuclear-weapon states are not peripheral but *vital* interests—Taiwan and the South China Sea for China, and Ukraine and the other former Soviet republics for Russia.

The first risk is compounded by a second. At the height of the Cold War, RAND Corporation strategist Albert Wohlstetter challenged the assumption of a stable nuclear deterrent condition in a 1959 *Foreign Affairs* article, "The Delicate Balance of Terror."<sup>5</sup> Wohlstetter's focus at that time was the vulnerability of

the US nuclear deterrent force, specifically manned bombers, to a disarming Soviet surprise attack. His concern was that in a crisis, Kremlin leadership could have perceived incentives to launch a preemptive strike. Since the Cuban missile crisis, assured retaliation—eliminating incentives for a surprise first strike—has been the *sine qua non* of strategic stability. In the new era of geostrategic competition, an unconstrained arms race could revive those incentives, making the deterrent relationships more “delicate.” Indeed, complicating the strategic calculus of preemption, such a surprise attack would likely occur in the non-traditional domains of cyberspace and outer space. During a crisis, one could envisage China or Russia launching an attack on US reconnaissance and communications satellites to blind the US military and disrupt command and control.

Since the bipolar nuclear era of the Cold War, the term strategic stability has been defined as encompassing two interrelated components: arms race stability and crisis stability. In this new era of geostrategic competition, the recasting of Cold War risks is exacerbating arms race instability *and* crisis instability. This article initially focuses on the rise of the tripolar nuclear order as China moves to acquire nuclear parity with the United States and Russia, changes in Russian nuclear doctrine and force structure, and the evolving US response to the challenge of deterring two nuclear-peer competitors. The second section examines the pathways of nuclear escalation under the conditions of emergent nuclear tripolarity. Building on that analysis, the third section addresses practical steps that might be undertaken to promote strategic stability. The article concludes with a recognition that the policy dilemmas of the emergent tripolar nuclear world cannot be resolved, but that they can be managed if the three powers commit to averting the dangers of unconstrained competition.

**T**his new  
geostrategic era is  
exacerbating risks  
of both arms race  
instability and crisis  
instability

## Deterring Two Nuclear Peers

In China’s drive for nuclear parity with the United States and Russia, various motivations—none mutually exclusive—likely account for Beijing’s departure from its longstanding minimal deterrent force posture. First, military modernization, including the expansion of nuclear capabilities, is a key element of Xi Jinping’s mandate that China become a world-class power. Second, China’s actions may have arisen out of concern that its existing minimalist nuclear force was susceptible to a US first strike—a vulnerability that could give the United States a

coercive-diplomacy option during a crisis. Third, the obverse of the second, is that these nuclear capabilities, in tandem with the expansion of China's conventional capabilities at the theater level, could provide Beijing coercive escalatory options during a crisis, most obviously over Taiwan with the United States.

The expansion of China's nuclear forces has called into question its no first use (NFU) commitment, under which Beijing pledged to eschew nuclear use unless attacked by an adversary employing nuclear weapons. In 2021, the US Department of Defense's annual assessment of Chinese military power reported that

**The expansion of  
China's nuclear  
forces has called  
into question its no  
first use  
commitment**

some ambiguity about the status of the pledge has been injected by Chinese military officers who have discussed nuclear first use in certain instances, such as conventional attacks threatening the country's nuclear forces or the survival of the Chinese Communist Party (CCP).<sup>6</sup> Related to the NFU issue is the readiness of China's nuclear forces. None of China's nuclear warheads, per the order of China's Central Military Commission—now chaired by Xi—have been deployed on missiles. This doctrinal policy of separating war-

heads and delivery vehicles may be undergoing reevaluation. Having deployed advanced radar that would alert of an impending attack, China may view such a launch on warning posture as consistent with its NFU pledge.<sup>7</sup>

In 2021, US State Department officials revealed that China conducted launch-on-warning exercises and deployed a satellite to support that posture. Is a launch-on-warning policy a hedge to ensure the survival of China's nuclear force against a US first strike, or central to a more aggressive Chinese strategy?<sup>8</sup> These alternative explanations are not mutually exclusive. Indeed, the ambiguity reflects a core tension in the Chinese word for "deterrence" (*weishe*), which has dual meanings—one character, *she*, encompasses the classic Western definition of forestalling an undesired action, while the other, *wei*, is a form of compellence in which the target state is coerced into acquiescing to Beijing's preferred policy outcome.<sup>9</sup>

China's nuclear expansion has occurred in tandem with its establishment of a quasi-alliance with Russia, which is modernizing its strategic nuclear forces but remains under the numerical constraints of New START. In February 2022, just weeks before Russia's invasion of Ukraine, a summit meeting between Putin and Xi Jinping reset the geostrategic triangle with a lengthy joint statement declaring that the alignment of Russia and China against the United States and the West had "no limits" and no "forbidden" areas of cooperation, an evident reference to joint military exercises. But this hyperbolic language belies clear

limits that have been evidenced by China's hedged support for Russia's invasion of Ukraine and Beijing's caution against the use of nuclear weapons.<sup>10</sup>

During the Cold War and post-Cold War eras, China was considered a lesser-included case, meaning that a US nuclear force configured against the enormous Soviet (then Russian) arsenal could address whatever contingency might arise with China and its relatively small, minimum deterrent capability. The impressive scope, scale and pace of China's and Russia's nuclear modernization programs now create a strategic inflection point for US national security officials. Russia has continued to invest in nuclear weapons as a symbol of great power status and as a less expensive option to conventional military forces. As relations with the United States deteriorated, Russia's nuclear forces were also a response to NATO's conventional superiority, which was demonstrated during the Gulf War of 1991 and NATO's intervention in Serbia/Kosovo in 1999.

Russia's modernization program began around 2000 and was at an advanced stage by 2020, with Putin claiming that over 80 percent of the country's nuclear triad was composed of advanced systems. A new generation of Russian capabilities, such as the *Avangard* hypersonic glide vehicle (a maneuverable warhead deployed on the SS-19), were designed to penetrate an antiballistic missile system. This development reflects Russian concern about the absence of constraints on defensive systems since the United States withdrew from the ABM Treaty in 2002.

In the years leading up to the 2022 invasion of Ukraine, Putin's speeches frequently referenced nuclear weapons, including one (with an accompanying video) announcing the development of a huge nuclear-armed torpedo—code-named *Kanyon* by the United States—that could traverse an ocean to blanket a huge coastal area with radioactivity.<sup>11</sup> This doomsday weapon aside, a range of other new systems have fueled speculation among some US analysts that Russia's nuclear strategy extends beyond a traditional core deterrence mission to regional warfighting.<sup>12</sup> The Trump administration's 2018 *Nuclear Posture Review* speculated that Russia had adopted an “escalate to deescalate” strategy entailing the early use of tactical nuclear weapons.<sup>13</sup> Russia's nuclear modernization program includes the development of a new generation of “nonstrategic weapons” not constrained under the New START Treaty.

**Russia's nuclear strategy may extend beyond traditional deterrence to regional warfighting**

In addressing the implications of emergent tripolarity for the future US nuclear force posture, Colin Kahl, then the Biden administration's Under Secretary of Defense for Policy, argued, “This is not a game of arithmetic ... [W]e shouldn't think ... that if Russia has 2,000 nuclear weapons and China has 1,000 nuclear

weapons, the United States needs 3,001 nuclear weapons.” Under Biden, he added, the US emphasis will remain on “a survivable second-strike capability” such that in any contingency with Russia and China, the United States would retain “enough in reserve to hold at risk so much that other nuclear powers hold valuable, that they wouldn’t dare to challenge the United States.”<sup>14</sup>

The Biden administration’s stance is consistent with a posture of maintaining an assured retaliatory capability *vis-à-vis* the United States’ two peer nuclear competitors. Critics have pushed for a substantial expansion of US nuclear forces as a hedge against two potential contingencies—that the quasi-alliance between Russia and China might lead them to coordinate their nuclear operations and, alternatively, that China’s projected attainment of nuclear parity with the United States in the mid-2030s might allow Beijing to pursue coercive diplomacy by threatening US ICBMs and strategic bombers in a future confrontation. Both scenarios are far-fetched and would not negate the efficacy of the US strategic nuclear deterrent, some two-thirds of which is deployed on highly survivable submarines.

## Escalatory Pathways and Nuclear Risks

---

The Ukraine War and Taiwan crisis highlight potential escalatory pathways arising from the recasting of two Cold War dangers—but this time, the stakes are of vital (not peripheral) interest and the central strategic relationships in the emergent tripolar nuclear order are becoming more dangerously complex. Crisis stability entails averting nuclear escalation such that “even in a conventional war or faced with a possible nuclear attack, states would not use nuclear weapons for fear that such escalation would bring certain disaster.”<sup>15</sup> Taking into account escalatory risks in the domains of cyberspace and outer space, this conceptualization should additionally include refraining from actions that compromise the command and control of—and communications with—nuclear systems.

Building on a rich body of analytical work on the topic from the Cold War, a 2008 RAND study usefully defined escalation as “an increase in the intensity or scope of conflict that crosses threshold(s) considered significant” by one state or the other in a confrontation.<sup>16</sup> During the Cold War, nuclear strategist Herman Kahn famously used the rungs of a ladder as a metaphor to convey how the United States could raise or lower escalatory threats or the actual use of force, including nuclear weapons. In assessing potential confrontations in a tripolar nuclear world, an alternative metaphor better conveys various factors: circuit breakers, which would prevent escalation, and conveyer belts, which heighten escalatory risks.<sup>17</sup> In this schema, a state would demarcate and reinforce

escalatory thresholds to deter an adversary from crossing them. “The subjective nature of escalation thresholds,” the RAND study noted, “has been an enduring problem for those seeking to control escalation, either to prevent it from occurring or to use the prospect of potential escalation as a coercive lever.”<sup>18</sup> During the Cold War, Western policymakers and analysts strived, with mixed success, to divine Soviet intentions and how the Kremlin would perceive escalatory thresholds in various contingencies.

Analytically, there are three main types of escalation—accidental, inadvertent and instrumental. In the new era of tripolar geostrategic competition, the confluence of arms race instability and crisis instability is heightening the risks of all three escalatory pathways.

**Arms race  
instability and crisis  
instability is heightening risks of all  
three escalatory  
pathways**

### **Accidental Escalation**

Accidental escalation occurs when a party to a conflict makes a bombing error through faulty targeting or takes a military action beyond its geographical bounds. A recent example occurred in November 2022, when a missile detonated in Poland killed two civilians during the war in Ukraine. Ukraine charged, and Moscow denied, that it was a Russian missile. The United States determined that the missile was actually a defensive Ukrainian air defense missile that had mistakenly strayed into Poland. Before that clarification, speculation focused on whether the strike constituted a geographical extension of the war by Russia beyond Ukraine.

Automated systems pose a different risk of accidental escalation and war. The “closest we’ve come to accidental nuclear war,” according to nuclear expert Bruce Blair, was a Soviet false alarm incident on September 26, 1983. A Soviet computer indicated that five US ICBMs had been launched at the Soviet Union. The false alarm was later attributed to a satellite malfunction. The incident occurred at a nadir in superpower relations, when the Soviet leadership was on edge about the possibility of a decapitating US first strike, particularly after the deployment of Pershing II missiles in West Germany with a 10-minute flight time to Moscow. According to Soviet military protocol, the alert should have triggered an order to prepare for retaliation, but the Soviet officer on duty correctly ascertained the alert to be a malfunction and did not report the alert to the senior leadership.<sup>19</sup> The Cold War-era risks of automated systems are being recast with the prospect of artificial intelligence being integrated into early warning systems. The use of AI in computational models for analyzing threats could have destabilizing implications for nuclear alerting if activated without human safeguards.<sup>20</sup>



### Inadvertent Escalation

Inadvertent escalation can occur during a crisis through misperception, such as when one side makes preparations to demonstrate resolve that the other side views as a prelude to use. In the nuclear realm, a heightened alert status and observable steps to prepare systems for operation by one side may create escalatory pressure on the other to act preemptively. This variant of inadvertent escalation highlights the controversy over a “launch-on-warning” policy, which runs destabilizing risks. In addition to the dangers of false alerts and computer hacking, a launch-on-warning posture is indistinguishable from a strategic force configured for a first strike.

The United States has rejected a launch-on-warning posture in its declared policy on nuclear employment. US doctrine allows for the possibility of a “launch-under-attack,” but with some two-thirds of US strategic nuclear weapons deployed on submarines, does not “rely on launch-under-attack to ensure a credible response.”<sup>21</sup> Putin has stated that Russian doctrine is based on a “launch on warning” concept. “When the early warning system receives a signal about a missile attack,” Putin declared, “we launch hundreds of missiles that are impossible to stop. Enemy missile warheads would inevitably reach the territory of the Russian Federation. But nothing would be left of the enemy too, because it’s impossible to intercept hundreds of missiles. And this, of course, is a factor of deterrence.”<sup>22</sup>

A related potential driver of inadvertent escalation is the targeting of an adversary’s conventional capabilities that are co-located with its nuclear capabilities, which could blur the line between conventional and nuclear operations. Political scientist Barry Posen has elucidated “how the interplay between conventional military operations and nuclear forces can inadvertently produce pressures for nuclear escalation in conflicts among states armed with both conventional and nuclear weaponry.”<sup>23</sup> During the Cold War, concern focused on the escalatory potential to the nuclear level of a large-scale NATO-Warsaw Pact conventional conflict. In the contemporary strategic relationship between the United States and China, an analogously dangerous dynamic is evident—that in the event of a conventional clash over Taiwan, the co-location of Chinese conventional and nuclear capabilities has inadvertent escalatory potential.<sup>24</sup> In terms of US forces, the co-location of conventional and nuclear-capable bombers in the same task forces could create confusion and an escalatory risk.<sup>25</sup>

The extension of great power competition into the unregulated domains of cyberspace and outer space creates new pathways for inadvertent escalation. The US Defense Department’s 2022 *National Defense Strategy* stated that in these domains “the risk of inadvertent escalation is particularly high due to unclear norms of behavior and escalation thresholds, complex domain interactions, and new capabilities.”<sup>26</sup> A major unknown is whether this escalatory

risk is viewed similarly by Russia and China, which may minimize the escalatory implications of actions in these domains. For example, does China view attacks on satellites without any immediate loss of life as escalatory?

### **Instrumental Escalation**

As defined in the RAND study, instrumental escalation occurs when “a combatant ... deliberately increases the intensity or scope of an operation to gain advantage or avoid defeat.”<sup>27</sup> Instrumental escalation—a coercive action to change the status quo and attain an objective—is a form of compellence, which Thomas Schelling distinguished from deterrence, the goal of which is to preserve the status quo. Both Russia and China, in an attempt to change the dynamic in their respective crises over Ukraine and Taiwan with the United States, may decide to deliberately cross an escalatory threshold.

In the Ukraine and Taiwan contingencies, Russia and China may believe they can prevail in what Schelling termed a “competition in risk-taking.” The Ukraine war continues to be waged under a nuclear shadow. Throughout the crisis, the Putin regime has engaged in dangerous rhetoric, but its military has not taken observable preparatory steps to employ nuclear weapons in Ukraine (acknowledging the caveat that the movement of small battlefield munitions, such as nuclear artillery, could escape detection). By early 2023, Putin’s nuclear saber-rattling, which spiked in autumn 2022 as Russia suffered military setbacks in Ukraine, had abated. Biden administration officials attributed this shift to the stabilization of Russia’s military situation along the front in eastern Ukraine, the positive deterrent effect of China’s warning against nuclear use, and improved communications between Washington and Moscow.<sup>28</sup>

CIA Director Burns has stated that “desperation” could potentially lead Russia to use a tactical nuclear weapon as a warning shot. US officials have identified two contingencies that would fit that criterion: the catastrophic collapse of Russia’s military position in eastern Ukraine and any perceived threat to the survival of the Putin regime itself.<sup>29</sup> Demonstrative nuclear use by Putin under these conditions would be an instance of *instrumental escalation*. In such a contingency, crisis instability in Ukraine would be exacerbated by emergent arms race instability—making the US-Russian strategic relationship more “delicate”—and thereby creating a heightened potential for either *inadvertent* or *accidental* escalation beyond Ukraine.

China’s emergent peer nuclear status may have “paradoxical” implications for strategic stability. As nuclear experts Abraham Denmark and Caitlin Talmadge

**Russia and China may decide to deliberately cross an escalatory threshold**

argue, a “nuclear stalemate might lead to more rather than less risk-taking by Chinese leaders: they could come to see conventional attacks or nonmilitary gray-zone aggression as a ‘safer’ option, carrying little risk of nuclear escalation.”<sup>30</sup> This prospective development is a form of the stability-instability paradox. Scenarios involving instrumental escalation by China include a naval blockade of Taiwan or Chinese occupation of the uninhabited island of Taiping, which is administered by Taiwan. The Chinese calculus of risk-taking would need to consider President Biden’s avowed security commitment to Taiwan, as well as the negative example of Putin’s effort to change the regional status quo through his regime’s invasion of Ukraine.

### **Promoting Strategic Stability**

---

Key elements—some aspirational, others operational, most uncertain—will affect the prospects for successful management in the emergent tripolar nuclear order. Even if the pathways for implementing these measures are not evident *politically*, we can *analytically* distinguish major policies that would promote strategic stability.

#### **Reinforce Comprehensive Deterrence**

Managing instability in a tripolar world requires the United States to maintain a robust strategy of deterrence in both its variants—deterrence by denial and deterrence by punishment. *Deterrence by punishment* seeks to affect the intention of a state to carry out a hostile act through the credible threat of a punitive response. After Russia’s invasion of Ukraine, the United States bolstered this variant of deterrence by reaffirming its collective security commitment through NATO and threatening “severe consequences” if Russia used nuclear weapons of any magnitude (and would not “slice the salami” in National Security Advisor Jake Sullivan’s phrase).<sup>31</sup>

Alternatively, *deterrence by denial* would entail defensive measures that frustrate an adversary’s ability to achieve its objective. In the new domains of cyber and space warfare, deterrence by denial strategies would entail hardening cyber and space assets to deny an adversary the benefits of an attack and thereby decrease the incentive for preemptive action in a crisis. Maintaining credible conventional military forces in key theaters is a form of deterrence by denial. Since the Russian invasion of Ukraine, NATO countries have increased military spending and forward deployed forces that are both more capable and visible.<sup>32</sup> In East Asia, the United States, whose conventional superiority has eroded, faces an analogous defense challenge with China over Taiwan. A comprehensive deterrence policy—one that integrates both variants—can affect

Russia's and China's strategic calculus. The goal is to have them abstain from Schelling's "competition in risk-taking" with the United States.

### **Maintain the Residual Arms Control Architecture**

Though Putin has suspended New START, Russia has stated it will continue to abide by its numerical constraint of 1,550 warheads on 700 delivery vehicles. New START will expire in 2026 and will not be extended beyond that date. With China's emergence as a peer nuclear competitor, the United States has made clear that China should be a party to any follow-on negotiations. The emerging conventional wisdom that "arms control is dead" must be qualified. States have always participated in arms control negotiations when their leaderships believe it serves their interest. Superpower arms control created a framework that structured US and Soviet force posture development—providing transparency and predictability. As China modernizes and expands its nuclear forces, Beijing may see that participating in trilateral arms control serves its interest by preserving the New START ceiling on strategic nuclear systems and thereby locking in its emergent parity status. Though China has eschewed trilateral negotiations on strategic nuclear arms, the demise of the Intermediate-Range Nuclear Forces (INF) Treaty, which had banned that entire category of weapons, could create an incentive for the Beijing regime to engage Washington on theater missiles to forestall a regional arms race. In addition, as China moves toward near-peer nuclear status with the United States, Beijing's increased confidence that China has attained an assured retaliatory capacity may create the basis for its participation in trilateral arms control talks.<sup>33</sup>

**The emerging conventional wisdom that "arms control is dead" must be qualified**

### **Mitigate the Risks of Unconstrained Competition**

In the absence of an arms control architecture, each nuclear power in the multipolar system will have strategic autonomy to structure its offensive and defensive systems. Since the Cuban missile crisis, assured retaliation—eliminating incentives for a surprise first strike—has been the *sine qua non* of strategic stability. The risk for crisis stability is that arms race instability—unregulated numbers of offensive and defensive systems, in tandem with new weapons technologies and cross-domain threats to space and cyber assets—could revive those incentives, making the deterrent relationships more unstable.

Progress to reduce escalatory risks may be made through reciprocal independent actions based on mutual interests. For example, the United States has

proposed a moratorium on tests of destructive, direct-ascent anti-satellite (ASAT) explosives that could be used preemptively against military satellites in a crisis. ASAT tests are also the source of destructive space debris in low earth orbit, which threaten manned space missions and satellites. Without a formal agreement, the United States, Russia and China might each unilaterally observe a tacit norm that proscribes ASAT tests.

Similarly, in February 2023, the Biden administration proposed norms governing the responsible military use of artificial intelligence. The impetus is that the traditional risks of automated systems, which dangerously generated several false alerts of attacks during the Cold War, are being recast with the prospect of artificial intelligence being integrated into nuclear warning systems. Emphasizing the primacy of human safeguards over any nuclear use, the administration advanced the norm that “states should maintain human control and involvement for all actions critical to informing and executing sovereign decisions concerning nuclear weapons employment.”<sup>34</sup> The current level of tension in US relations with Russia and China could lend credence to a faulty alert and precipitate preemptive action through inadvertent escalation. The three powers have a mutual interest in preventing this threat to strategic stability. Paul Stares of the Council on Foreign Relations has proposed “a deliberate process of mutual reassurance and reciprocated restraint” that he characterizes as “mutual assured survival.”<sup>35</sup>

### **Avoid Blurring Conventional Military and Nuclear Operations**

Placing conventional warheads on ballistic or hypersonic missiles, as envisioned in the “Conventional Prompt Global Strike” (the ability to reach any target on the globe in under one hour) has utility, but runs the risk that Russia may perceive, and respond to, the launch of a missile it associates with US nuclear capabilities as the initiation of such an attack.<sup>36</sup> A similar concern has been raised with respect to dual-use hypersonic weapons developed by Russia and China that could carry either nuclear or conventional warheads. An additional driver of inadvertent escalation is the targeting of an adversary’s conventional capabilities that are co-located with its nuclear capabilities. Concern that the use of conventional military weapons could escalate a conflict by placing nuclear assets at risk has been raised most acutely with respect to the strategic competition between the United States and China.<sup>37</sup>

### **Maintain Open Diplomatic and Military Communication Lines**

US Secretary of Defense Lloyd Austin, citing “the importance of maintaining lines of communication amid the ongoing war,” has spoken to Russian Minister of Defense Sergei Shoigu several times. Director of Central Intelligence William J. Burns has likewise maintained an open channel of communication with his

counterparts to convey messages to Putin from Biden, including warning Russia against any use of tactical nuclear weapons in Ukraine. In addition, NATO and the Russian military have a “deconfliction” line, which, as with the other channels, can avoid miscommunications and inadvertent escalation. With China, the Code for Unplanned Encounters at Sea (CUES), to which both China and the United States are signatories, may be a mechanism for managing maritime tensions between their navies.

### **Manage Complex Linkages in a Tripolar System**

Actions taken to address one adversary in a triadic relationship can affect the other. The US withdrawal from the INF Treaty was occasioned by Russian cheating (with deployment of a new cruise missile) but was precipitated by the theater-missile threat in East Asia posed by a rising China. These complex linkages were also evident in China’s response to the US deployment of the Terminal High Altitude Area Defense (THAAD) antimissile system in South Korea that was precipitated by North Korea’s ballistic missile advances, but which Beijing perceives as the precursor to a more elaborate defensive capability aimed at neutralizing China’s nuclear deterrent.<sup>38</sup>

### **Nuclear Risks in the New Cold War**

Looking to a future beyond the Ukraine war, the Biden administration and US NATO allies are already considering a revived version of diplomat George Kennan’s containment strategy to deter and balance Russian power on its periphery, whether Putin continues to rule in the Kremlin or not. Kennan’s advocacy of a strategy of the “long-term patient but firm and vigilant containment of Russian expansive tendencies” in his seminal 1947 *Foreign Affairs* article resonates today. With China, the Biden administration has enunciated security commitments (witness the President’s new formulation on Taiwan) and coercive economic policies (for example, banning the export of US microchip technology) that amount to neo-containment. As during the Cold War, such a neo-containment strategy should pragmatically allow for engagement with Russia and China on strategic stability to avoid the prospect of unconstrained and destabilizing arms competition.

When Einstein was asked how he could unravel the structure of the atom but was unable to devise political means to prevent it from destroying humanity, he famously replied, because “politics is more difficult than physics.” Compared to the Cold War era, current nuclear risks are even more complex and dangerous because of the multiplicity of actors, emergent technologies, and the absence of an institutional framework to manage competition. The policy tensions

## Nuclear risks are even more complex and dangerous than the Cold War era

created by the recasting of the Cold War risks—the “stability-instability paradox” and the “delicate balance of terror”—will affect the prospects for strategic stability and the avoidance of crisis instability in Europe (related to the Ukraine War) and in Asia (over Taiwan).

Whether or not the new state of relations between the United States, Russia and China should be described as a new Cold War, the three powers have a mutual interest in not revisiting the dangers of that era—ensuring that no power has a perceived interest in going first and early in a crisis. In the new tripolar nuclear world, these policy tensions cannot be resolved, but they can be managed. They will not be managed, however, absent a threshold recognition among the three powers of their mutual interest in halting the destabilizing spiral into unconstrained competition.

### Notes

1. “And then there were three: How will America deal with three-way nuclear deterrence?” *Economist*, November 29, 2022, <https://www.economist.com/united-states/2022/11/29/how-will-america-deal-with-three-way-nuclear-deterrence>.
2. US Department of Defense, “Nuclear Posture Review,” October 27, 2022, 4, <https://media.defense.gov/2022/Oct/27/2003103845/-1/-1/1/2022-NATIONAL-DEFENSE-STRATEGY-NPR-MDR.PDF>.
3. David E. Sanger and Julian E. Barnes, New York Times, “C.I.A. Director Airs Concern That Putin Might Turn to Nuclear Weapons,” *New York Times*, April 15, 2022, <https://www.nytimes.com/2022/04/14/us/politics/putin-nuclear-weapons.html>.
4. Michael Krepon, “The Stability-Instability Paradox,” *Arms Control Wonk*, November 2, 2010, <https://www.armscontrolwonk.com/archive/402911/the-stability-instability-paradox/>.
5. Albert Wohlstetter, “The Delicate Balance of Terror,” *Foreign Affairs* 37 (1959): 211-234, <https://www.foreignaffairs.com/articles/1959-01-01/delicate-balance-terror>.
6. US Department of Defense, *Military and Security Developments Involving the People’s Republic of China 2021*, 90-91.
7. Ibid.
8. Hans M. Kristensen and Matt Korda, “Chinese nuclear weapons, 2021,” *Bulletin of the Atomic Scientists* 77, no. 6 (November 2021): 322-323.
9. I am indebted to Robert Daly, Director of the Wilson Center’s Kissinger Institute on China and the United States for this translation and explanation; See also Nathan Beauchamp-Mustafaga, Derek Grossman, Kristen Gunness, Michael S. Chase, Marigold Black, and Natalia D. Simmons-Thomas, *Deciphering Chinese Deterrence Signalling in the New Era: An Analytic Framework and Seven Case Studies* (Santa Monica, CA: RAND Corporation, 2021), viii.

10. Max Seddon, James Kyngge, John Paul Rathbone, and Felicia Schwartz, "Xi Jinping warned Vladimir Putin against nuclear attack in Ukraine," *Financial Times*, July 5, 2023.
11. David E. Sanger and William J. Broad, "Putin's Threats Highlight the Dangers of a New, Riskier Nuclear Era," *New York Times*, June 1, 2022, <https://www.nytimes.com/2022/06/01/us/politics/nuclear-arms-treaties.html>.
12. Hans M. Kristensen and Matt Korda, "Nuclear Notebook: Russian nuclear forces, 2022," *Bulletin of the Atomic Scientists*, 78 (2022): 102.
13. US Department of Defense, "Nuclear Posture Review 2018," 30.
14. Speech by Colin H. Kahl, Under Secretary of Defense for Policy, Defense Writers Group Project for Media and National Security, George Washington School of Media and Public Affairs, November 8, 2022, <https://nationalecuritymedia.gwu.edu/project/dr-colin-h-kahl-under-secretary-of-defense-for-policy/>.
15. Christopher F. Chyba and Robert Legvold, "Conclusion: Strategic Stability & Nuclear War," in Steven E. Miller, Robert Legvold, and Lawrence Freedman (eds.), *Meeting the Challenges of the New Nuclear Age: Nuclear Weapons in a Changing Global Order* (Cambridge, MA.: American Academy of Arts and Sciences, 2019), 226.
16. Forrest E. Morgan, Karl P. Mueller, Evan S. Medeiros, Kevin L. Pollpeter, and Roger Cliff, *Dangerous Thresholds: Managing Escalation in the 21st Century* (Santa Monica, CA: RAND Corporation, 2008), 8, <https://www.rand.org/pubs/monographs/MG614.html>.
17. Duke University professor Bruce Jentleson first used this metaphor in relations to sanctions policy, and its application to escalatory risks appears apt.
18. Morgan, et al., *Dangerous Thresholds*, 12-13.
19. Center for Arms Control and Non-Proliferation, "The Soviet False Alarm Incident and Able Archer 83," October 14, 2022, <https://armscontrolcenter.org/the-soviet-false-alarm-incident-and-able-archer-83/>.
20. Matt Field, "As the US, China, and Russia build new nuclear weapons systems, how will AI be built in?," *Bulletin of the Atomic Scientists*, December 20, 2019, <https://thebulletin.org/2019/12/as-the-us-china-and-russia-build-new-nuclear-weapons-systems-how-will-ai-be-built-in/>.
21. US Department of Defense, "Report on the Nuclear Employment Strategy of the United States – 2020," [https://www.esd.whs.mil/Portals/54/Documents/FOID/Reading%20Room/NCB/21-F-0591\\_2020\\_Report\\_of\\_the\\_Nuclear\\_Employment\\_Strategy\\_of\\_the\\_United\\_States.pdf](https://www.esd.whs.mil/Portals/54/Documents/FOID/Reading%20Room/NCB/21-F-0591_2020_Report_of_the_Nuclear_Employment_Strategy_of_the_United_States.pdf).
22. "Putin says Russia could adopt US preemptive strike concept," *Associated Press*, December 9, 2022, <https://apnews.com/article/putin-moscow-strikes-united-states-government-russia-95f1436d23b94fbc05f1c2242472d5c>.
23. Barry R. Posen, *Inadvertent Escalation: Conventional War and Nuclear Risks* (Ithaca, NY: Cornell University Press, 1991), ix.
24. Caitlin Talmadge, "Would China Go Nuclear? Assessing the Risk of Chinese Nuclear Escalation in a Conventional War with the United States," *International Security* 41, no. 4 (2017): 50-92.
25. Hans M. Kristensen and Matt Korda, "United States nuclear weapons, 2022," *Bulletin of the Atomic Scientists* 78 (2022): 168.
26. US Department of Defense, *National Defense Strategy 2022*, October 27, 2022, 6, <https://media.defense.gov/2022/Oct/27/2003103845/-1/-1/1/2022-NATIONAL-DEFENSE-STRATEGY-NPR-MDR.PDF>.
27. Morgan, et al., *Dangerous Thresholds*, 8.



28. Julian E. Barnes and David E. Sanger, "Fears of Russian Nuclear Weapons Use Have Diminished, but Could Re-emerge," *New York Times*, February 3, 2023, <https://www.nytimes.com/2023/02/03/us/politics/russia-nuclear-weapons.html>.
29. Ibid; David E. Sanger and Julian E. Barnes, "C.I.A. Director Airs Concern That Putin Might Turn to Nuclear Weapons," *New York Times*, April 15, 2022, <https://www.nytimes.com/2022/04/14/us/politics/putin-nuclear-weapons.html>.
30. Abraham Denmark and Caitlin Talmadge, "Why China Wants More and Better Nukes: How Beijing's Nuclear Buildup Threatens Stability," *Foreign Affairs*, November 19, 2021, <https://www.foreignaffairs.com/articles/china/2021-11-19/why-china-wants-more-and-better-nukes>.
31. Tara Subramaniam et al., "US won't tolerate Russian nuclear attacks in any form, national security adviser says," *CNN*, October 17, 2022, [https://www.cnn.com/europe/live-news/russia-ukraine-war-news-10-17-22/h\\_ea083a7134f0b96b80e91565feac1172](https://www.cnn.com/europe/live-news/russia-ukraine-war-news-10-17-22/h_ea083a7134f0b96b80e91565feac1172).
32. Steven Erlanger, "Russian Invasion of Ukraine Revolutionizes NATO Military Strategy," *New York Times*, April 17, 2023, <https://www.nytimes.com/2023/04/17/world/europe/nato-russia-ukraine-war.html>.
33. George Perkovich, "Engaging China on Strategic Stability and Mutual Vulnerability," Working Paper, Carnegie Endowment for International Peace, October 2022, <https://carnegieendowment.org/2022/10/12/engaging-china-on-strategic-stability-and-mutual-vulnerability-pub-88142>.
34. Department of State, Bureau of Arms Control, Verification and Compliance, "Political Declaration on Responsible Military Use of Artificial Intelligence and Autonomy," February 23, 2023, <https://www.state.gov/political-declaration-on-responsible-military-use-of-artificial-intelligence-and-autonomy/>.
35. Paul B. Stares, "Averting Major Power War: The Logic of Mutual Assured Survival," Council on Foreign Relations, Discussion Paper Series on Managing Global Disorder no. 12 (February 2023): 3, <https://www.cfr.org/report/averting-major-power-war>.
36. Amy F. Woolf, "Conventional Prompt Global Strike and Long-Range Ballistic Missiles: Background and Issues," Congressional Research Service, report no. 41464, January 10, 2013.
37. Talmadge, "Would China Go Nuclear?"
38. David E. Sanger and Edward Wong, "U.S. Ends Cold War Missile Treaty, With Aim of Countering China," *New York Times*, August 1, 2019, <https://www.nytimes.com/2019/08/01/world/asia/inf-missile-treaty.html>.