



US/NATO-Russian Strategic Stability and the War in Ukraine

Mary Chesnut

Abstract

This paper analyzes the role of nuclear weapons in Russia's war in Ukraine as well as the war's impact on overall US/North Atlantic Treaty Organization (NATO)-Russian strategic stability, exploring both arms race stability and crisis stability. Because many of the potential nuclear escalation pathways involve escalation from the use of conventional (non-nuclear) weapons, this paper also necessarily explores the interactions between conventional war and potential nuclear use. The paper begins by applying an existing, modified framework for understanding escalation to US/NATO-Russian stability in the Russo-Ukrainian war. Escalatory actions, both real and hypothetical, are examined through two categories: "horizontal" and "vertical." Finally, long-term impacts on US/NATO-Russian strategic stability are examined.

This report is part of a series generously funded by a grant from the Carnegie Corporation of New York. CNA's Occasional Paper series is published by CNA, but the opinions expressed are those of the author(s) and do not necessarily reflect the views of CNA or the Department of the Navy.

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Approved by:

June 2023



Michael Kofman, Research Program Director
Russia Studies Program
Strategy, Policy, Plans and Programs Division

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Introduction

This paper analyzes the role of nuclear weapons in Russia’s war in Ukraine as well as the war’s impact on overall US/North Atlantic Treaty Organization (NATO)–Russian strategic stability. Strategic stability refers to the existence of two conditions: (1) **crisis stability**, where there is no incentive for either country to conduct a first nuclear strike, and (2) **arms race stability**, where there is no incentive for either country to augment its nuclear arsenal to gain significant advantages over the other’s.¹ The paper uses open-source data to analyze the immediate and longer-term impacts of the Russo-Ukrainian war on both crisis stability and on arms race stability. Because many of the potential nuclear escalation pathways involve escalation from the use of conventional (non-nuclear) weapons, this paper also necessarily explores the interactions between conventional war and potential nuclear use.

This paper begins by applying an existing framework for understanding escalation to examine US/NATO-Russian strategic stability in the Russo-Ukrainian war. After assessing real and hypothetical instances of horizontal and vertical escalation, it appears that avoiding and deterring horizontal escalation on both sides, at least in this conflict, may be easier and more successful given appreciation for the inherent risks of two nuclear weapons states fighting each other directly. By contrast, vertical escalation may be more challenging to deter, and red lines may be harder to gauge. This is in part due to the fact that the effects of Western vertical escalation may compound slowly over time. Two major additional escalation challenges arise where there is significant ambiguity between sides: (1) What does Russia consider “Russian homeland” or “Russian territory”?, and (2) When does Western support become direct involvement? The inherent ambiguity in these questions presents opportunities for deliberate risk manipulation as well as miscalculation.

In addition, while the US has attempted to prevent the deterioration of crisis stability from having a spillover impact on arms race stability by de-linking the two issues, Russia has consistently stressed throughout the conflict that it could not divorce the matter of bilateral arms control from “geopolitical realities.” As a result of Russia’s invasion of Ukraine and its subsequent political linkages, the future of the New START nuclear agreement and of US-Russian nuclear arms control is uncertain. Although this case study alone is not sufficient in demonstrating any broader relationship between crisis stability and arms race stability, it does highlight the fragility of even a legally binding arms control treaty in the context of worsening peer competitor relations, and the fact that *both* parties must be willing to continue complying with and implementing the agreement for its sustained success.

¹ Definitions for strategic stability vary. These definitions are derived and modified from several sources, including leading Russian and US scholars, such as Andrei Kokoshin, *Ensuring Strategic Stability in the Past and Present: Theoretical and Applied Questions*, Belfer Center, 2011, <https://www.belfercenter.org/sites/default/files/files/publication/Ensuring%20Strategic%20Stability%20by%20A.%20Kokoshin.pdf>; Leonor Tomero, “US-Russia Strategic Stability Dialogue: Purpose, Progress, Challenges, and Opportunities,” *Russia Matters*, Dec. 15, 2021, <https://www.russiamatters.org/analysis/us-russia-strategic-stability-dialogue-purpose-progress-challenges-and-opportunities>; James Acton, “Reclaiming Strategic Stability,” Carnegie Endowment for International Peace, Feb. 5, 2013, <https://carnegieendowment.org/2013/02/05/reclaiming-strategic-stability-pub-51032>.

Finally, there are a variety of wide-ranging near-term and long-term impacts that flow from Russia's invasion of Ukraine. Near-term impacts include several NATO reactions to enhance security and reassure alliance members, the stagnation of the Strategic Stability Dialogue (SSD), and Russia's suspension of and noncompliance with the New START treaty. In the long term, the security dilemma response loop poses significant risks for US-Russia and NATO-Russia relations, Russia may have an increased Russian reliance on its nuclear arsenal, and the already-complicated environment for negotiating future US-Russian bilateral nuclear arms control agreements may become more tenuous.

Background

On February 24, 2022, Vladimir Putin announced Russia's "special military operation" in Ukraine, following more than eight years of conflict after Moscow's annexation of Crimea and the prolonged presence of Russian-backed separatists in the Donbas region of eastern Ukraine. Following a buildup of well over 100,000 troops on Ukraine's border, and repeated denials that it was planning to invade its neighbor,² Putin ordered the Russian invasion in order to "protect people who, for eight years now, have been facing humiliation and genocide perpetrated by the Kyiv regime," adding that Russia "will seek to demilitarize and denazify Ukraine."³ Moscow also routinely justified its invasion by falsely claiming that Ukraine was seeking to acquire nuclear weapons, and that the US and Ukraine were involved in creating biological weapons.⁴

In addition to Russia's protracted conflict with Ukraine, parts of the war have involved or referenced Russia's relationship with the NATO alliance, even though the alliance is not formally involved. In the weeks leading up to the invasion, Moscow presented two "draft treaties" to the US and NATO containing security demands widely viewed as non-starters by Washington and Brussels—including to withdraw NATO forces from Eastern Europe, forgo future NATO expansion, and "not implement security measures that could undermine core security interests" of Russia.⁵ Although the US rejected the security demands, Secretary of State Antony Blinken offered what he called a "serious diplomatic path" to resolving

² Vladimir Kuznetsov and Nancy Cook, "U.S. Ramps Up Ukraine Warnings as Russia Denies Invasion Plans," Bloomberg, Feb. 17, 2022, <https://www.bloomberg.com/news/articles/2022-02-17/russia-tells-u-s-no-ukraine-invasion-planned-tass-says?leadSource=verify%20wall>.

³ "Address by the President of the Russian Federation," Feb. 24, 2022, <http://en.kremlin.ru/events/president/news/67843>.

⁴ Edith M. Lederer, "Russia Seeks UN Probe of Claims on Ukraine Biological Labs," AP News, Oct. 25, 2022, <https://apnews.com/article/russia-ukraine-europe-united-states-nations-biological-weapons-a782591e10eae1530671500710c0b79f>.

⁵ "Agreement on Measures to Ensure the Security of the Russian Federation and Member States of the North Atlantic Treaty Organization," Foreign Ministry of the Russian Federation, Dec. 17, 2021, https://mid.ru/ru/foreign_policy/rso/nato/1790803/?lang=en; "Treaty between the United States of America and the Russian Federation on security guarantees," Foreign Ministry of the Russian Federation, Dec. 17, 2021, https://mid.ru/ru/foreign_policy/rso/nato/1790818/?lang=en.

Moscow's security concerns.⁶ However, Putin did not opt for this approach. In the February 24 speech in which he announced the "special military operation," Putin said in reference to Ukraine,

The problem is that in territories adjacent to Russia, which I have to note is our historical land, a hostile "anti-Russia" is taking shape. *Fully controlled from the outside, they are doing everything to attract NATO armed forces and obtain cutting-edge weapons....* It is not only a very real threat to our interests but to the very existence of our state and to its sovereignty. *It is the red line which we have spoken about on numerous occasions. They have crossed it.*⁷

Similar sentiments were highlighted in Putin's address to the Federal Assembly three days earlier, where NATO was mentioned 41 times.⁸

Nuclear threats, signaling, and the fear of Russia's use of nuclear weapons have played a significant role in the war in Ukraine since the very beginning of the conflict, when Putin threatened that if any external actors attempted to interfere, Russia would respond "immediately, and the consequences will be such as you have never seen in your entire history."⁹ Such threats, as well as the overall decline in strategic stability between Russia and the US/NATO, are examined in greater detail in the subsequent portions of this paper.

Part I: Crisis Stability

This section of the paper explores escalation pathways and the role of nuclear weapons in the Russo-Ukrainian war, as well as both the immediate and longer-term impacts of the war on crisis stability.

Applying an escalation framework for considering US/NATO-Russian stability in the Russo-Ukrainian war

In several studies examining the nature of escalation in armed conflict that predate the war in Ukraine, the authors group escalation into a variety of different categories, including horizontal and vertical.¹⁰ This section of the report examines a selection of real and hypothetical escalation scenarios that run the

⁶ "U.S. Rejects Russian Demand on NATO Expansion, But Offers 'Path' Out of Ukraine Crisis," Radio Free Europe/Radio Liberty, Jan. 26, 2022, <https://www.rferl.org/a/russia-ukraine-biden-putin-sanctions/31671771.html>.

⁷ "Address by the President of the Russian Federation," Feb. 24, 2022, <http://en.kremlin.ru/events/president/news/67843>, emphasis added.

⁸ "Address by the President of the Russian Federation," Feb. 21, 2022, <http://en.kremlin.ru/events/president/news/67828>

⁹ "Address by the President of the Russian Federation," Feb. 24, 2022, <http://en.kremlin.ru/events/president/news/67843>

¹⁰ Forrest E. Morgan, Karl P. Mueller, Evan S. Medeiros, Kevin L. Pollpeter, and Roger Cliff, *Dangerous Thresholds: Managing Escalation in the 21st Century*, RAND, 2008, <https://www.rand.org/pubs/monographs/MG614.html>, pp. 18–20; Madison Estes, *Prevailing Under the Nuclear Shadow: A New Framework for Escalation Management*, CNA, Sept. 2020, [https://www.cna.org/archive/CNA_Files/pdf/crm-2020-u-027973-final%20\(002\).pdf](https://www.cna.org/archive/CNA_Files/pdf/crm-2020-u-027973-final%20(002).pdf).

risk of intensifying the Russo-Ukrainian war, plausibly to the point where nuclear use is considered, and groups them into the categories of horizontal and vertical escalation. Although these categories are imperfect, and differ somewhat from the referenced studies, viewing escalation through this lens may help us better conceptualize, assess, and manage the dynamics at play in the conflict. US/NATO and Russian threats designed to deter horizontal and vertical escalation are discussed later in this paper.

Horizontal escalation

Horizontal escalation refers to instances that would *expand the geographical scope or number of combatants of the conflict*. A 2008 RAND report identifies horizontal escalation as including expanded locations of targets and broadened boundaries of the conflict.¹¹ In the context of the Russo-Ukrainian war, several potential instances of horizontal escalation could further escalate the conflict – perhaps eventually into nuclear use -- such as Russia and US/NATO fighting each other directly.

- Potential Western-initiated actions include the following:
 - **The creation of a Western-enforced no-fly zone**, which was proposed by Ukraine and discussed at the beginning of the conflict.¹² Although the US has supported no-fly zones in conflicts in Iraq, Bosnia, and Libya, the enforcement of a no-fly zone in this conflict would involve US/NATO-country pilots and aircraft directly confronting Russian pilots and aircraft.¹³
 - **The deployment of US or NATO forces to fight directly against Russian forces in Ukraine**. President Joe Biden stressed early and consistently that this option was not on the table.¹⁴ Some US analysts have also suggested striking Russian military forces and infrastructure inside Ukraine if Russia were to use a tactical nuclear weapon.¹⁵
 - **Any direct US or NATO military actions against Russia or the Russian exclave of Kaliningrad**.
 - **NATO expansion to include Ukraine while the conflict is ongoing**, which would similarly position Russia and NATO in direct conflict. On September 30, 2022, Ukrainian President Volodymyr Zelensky announced a “fast-track” bid to join NATO.¹⁶

¹¹ Morgan et al., *Dangerous Thresholds*, pp. 18-20.

¹² “Ukraine calls for no-fly zone to stop Russian bombardment,” Reuters, Feb. 28, 2022, <https://www.reuters.com/world/europe/russias-isolation-deepens-ukraine-resists-invasion-2022-02-28/>.

¹³ Grace Hwang, Christopher Reid, and Matthew Strohmeier, “Considering the No-Fly Zone Prospects in Ukraine,” Center for Strategic and International Studies (CSIS), Mar. 30, 2022, <https://www.csis.org/analysis/considering-no-fly-zone-prospects-ukraine>.

¹⁴ “Remarks by President Biden on Russia’s Unprovoked and Unjustified Attack on Ukraine,” Feb. 24, 2022, <https://www.whitehouse.gov/briefing-room/speeches-remarks/2022/02/24/remarks-by-president-biden-on-russias-unprovoked-and-unjustified-attack-on-ukraine/>.

¹⁵ Paul Sonne and John Hudson, “U.S. Has Sent Private Warnings to Russia Against Using a Nuclear Weapon,” *Washington Post*, Sept. 22, 2022, <https://www.washingtonpost.com/national-security/2022/09/22/russia-nuclear-threat-us-options/>.

¹⁶ Isabelle Khurshudyan and Emily Rauhala, “Zelensky Pushes ‘Accelerated’ Application for Ukraine NATO Membership,” *Washington Post*, Sept. 30, 2022, <https://www.washingtonpost.com/world/2022/09/30/ukraine-application-nato-russia-war/>.

- **The use of Western-supplied military aid, such as long-range artillery, to target the Russian homeland.** In an effort to prevent such escalation before supplying High Mobility Artillery Rocket Systems (HIMARS) to Ukraine, the US had Kyiv agree to use the HIMARS only against Russian targets *within* Ukraine.¹⁷ Russian officials have continually warned of the escalation risks associated with supplying Ukraine with long-range artillery.¹⁸
- Potential Russian-initiated actions include the following:
 - **Any attack or aggressive action against a NATO country** that could trigger Article 4 or Article 5 of NATO's founding treaty. Plausible scenarios could include a Russian attack on an aid convoy inside NATO borders en route to Ukraine.¹⁹ The potential for such accidental or underinformed escalation²⁰ was witnessed when errant missile fragments, initially presumed to be Russian (though likely Ukrainian), hit NATO-member Poland's territory in November 2022, killing two civilians.²¹
 - **An expansion of apparent Russian war aims, such as attacks on Moldova or other neighboring countries.**²²

Both Russian and US/NATO officials acknowledge that having two nuclear weapons states directly fighting each other is dangerous, unstable, and undesirable.²³ **Because of these widely acknowledged concerns, aspects of horizontal escalation between US/NATO and Russia may actually be more**

¹⁷ Tom O'Connor, "Ukraine Has Promised U.S. Not to Fire New 50-Mile-Range Rockets Into Russia," *Newsweek*, May 31, 2022, <https://www.newsweek.com/ukraine-has-promised-us-not-fire-new-50-mile-range-rockets-russia-1711887>.

¹⁸ Paul Shinkman, "Russia Threatens U.S. Against Sending Patriots to Ukraine: 'An Escalation of the Conflict,'" *U.S. News*, Dec. 15, 2022, <https://www.usnews.com/news/world-report/articles/2022-12-15/russia-threatens-u-s-against-sending-patriots-to-ukraine-an-escalation-of-the-conflict>.

¹⁹ Holly Ellyat, "Western Arms Convoys to Ukraine Are 'Legitimate Targets,' Russia Warns," *CNBC*, Mar. 12, 2022, <https://www.cnn.com/2022/03/11/ukraine-needs-more-weapons-the-west-fears-provoking-war-with-russia.html>.

²⁰ Escalation is also commonly divided into deliberate, inadvertent, and accidental. According to a CNA report, accidental escalation results from "unintended events and actions, mechanical failure or human error, or even from intentional but unauthorized action by subordinates in the chain of command against the direction of national leaders"; Estes, *Prevailing Under the Nuclear Shadow*.

²¹ Liz Sly, "Ukraine Says Missile Parts that Landed in Poland May Have Been Ukrainian," *Washington Post*, Nov. 18, 2022, <https://www.washingtonpost.com/world/2022/11/18/ukraine-missile-poland-nato-russia/>.

²² This would also be considered *political escalation* according to Morgan et al., *Dangerous Thresholds*, and Estes, *Prevailing Under the Nuclear Shadow*, but this category has been omitted for the purposes of this paper. See also Ellie Cook, "NATO Deputy on How Alliance Would React If Moldova Is Attacked by Russia," *Newsweek*, March 1, 2023, <https://www.newsweek.com/nato-deputy-alliance-react-moldova-attacked-russia-ukraine-1784552>; Emily Rauhala, Leo Sands, Rachel Pannett, Dan Lamothe, and Nick Parker, "Ukraine-Russia Live Briefing: Moldova Says Kremlin Is Planning 'Violent Action' Against It," *Washington Post*, Feb. 13, 2023, <https://www.washingtonpost.com/world/2023/02/13/russia-ukraine-war-latest-updates/>; "Why Moldova Fears It Could Be Next for Putin," *CNN*, Feb. 26, 2023, <https://www.cnn.com/2023/02/26/europe/moldova-transnistria-russia-tensions-explainer-intl/index.html>.

²³ "NATO's Response to Russia's Invasion of Ukraine," North Atlantic Treaty Organization, accessed Mar. 20, 2023, https://www.nato.int/cps/en/natohq/topics_192648.htm.

easily managed. For example, under a section discussing a potential no-fly zone, NATO's webpage on Russia's war in Ukraine states the following:

NATO's actions are defensive, designed not to provoke conflict but to prevent conflict. The Alliance has a responsibility to ensure that this war does not escalate and spread beyond Ukraine, which would be even more devastating and dangerous. Enforcing a no-fly zone would bring NATO forces into direct conflict with Russia. This would significantly escalate the war and lead to more human suffering and destruction for all countries involved.²⁴

In addition, before supplying Ukraine with long-range artillery systems or approving the supply of US-made F-16s, the US stipulated that neither be used to target Russian territory.²⁵ Such caution is seen in past conflicts involving both countries, resulting in US and Russian deconfliction mechanisms, the use of hotlines and private talks, and by instances of restraint exercised by both sides. For example, direct conflict was successfully averted in the Syrian war through communication and deconfliction mechanisms.²⁶

Arguably, the closest instance to direct US-Russian conflict during the Russo-Ukrainian war occurred March 14, 2023, when a Russian Su-27 pilot shot down an American MQ-9 Reaper drone operating in international airspace over the Black Sea, not far from Crimea. However, the circumstances of the event—such as whether this was intentional signaling sanctioned by top Russian officials, or merely the result of a close approach gone wrong—are not fully understood.²⁷ In either case, the escalation potential was somewhat limited, as there were no casualties involved. In addition, the US response was one of restraint; officials chose not to further escalate the situation.²⁸

Vertical escalation

Another type of escalation identified in previous studies is **vertical escalation**—or instances that would lead to *an intensification of the existing conflict*. According to the 2008 RAND report, these could include the use of additional types of weapons, types of targets, and the frequency of attacks.²⁹ In the context of the Russo-Ukrainian war, such instances of vertical escalation between US/NATO and Russia could include a variety of actions.

²⁴ Ibid.

²⁵ Lolita Baldor and Ben Fox, "US Sends Rocket Systems to Ukraine to Stall Russian advance," AP News, June 1, 2022, <https://apnews.com/article/russia-ukraine-technology-government-and-politics-d3265158d6fff41594d247340fa4d53a>.

²⁶ Andrew Weiss and Nicole Ng, "Collision Avoidance: The Lessons of U.S. and Russian Operations in Syria," Carnegie Endowment for International Peace, Mar. 20, 2019, <https://carnegieendowment.org/2019/03/20/collision-avoidance-lessons-of-u.s.-and-russian-operations-in-syria-pub-78571>.

²⁷ "Despite Downed Drone, U.S. Says It Will Keep Flying Near Ukraine," NPR, Mar. 15, 2023, <https://www.npr.org/2023/03/14/1163414094/russian-fighter-jet-hits-u-s-military-drone-over-black-sea-forcing-it-down>.

²⁸ "Despite Downed Drone, U.S. Says It Will Keep Flying Near Ukraine," NPR, Mar. 15, 2023, <https://www.npr.org/2023/03/14/1163414094/russian-fighter-jet-hits-u-s-military-drone-over-black-sea-forcing-it-down>.

²⁹ Morgan et al., *Dangerous Thresholds*, pp. 18–20.

- Potential Western-initiated actions include the following:
 - **The supply of new types of Western aid to Ukraine.** This aid has incrementally included systems such as howitzers, Javelins, Stingers, Leopard and Abrams tanks, armored combat vehicles, Patriot systems, MiG fighter jets, HIMARS, air-launched cruise missiles (ALCMs) such as Storm Shadow and SCALP-EG, and will likely include other systems such as F-16s.³⁰ Longer-range artillery such as the MGM-140 Army Tactical Missile System (ATACMS) has thus far been off the table.
 - **The imposition of additional sanctions against Russia.** While this is not a military action, Putin has stated that the sanctions being imposed are “akin to a declaration of war”, and they have been a major tool that the West has used to attempt to coerce and punish Russian aggression against Ukraine.³¹
- Potential Russian-initiated actions include the following:
 - **Targeting of Ukrainian civilians.** Russian attacks on civilians and civilian infrastructure have been ongoing throughout the war.
 - **Illegal Russian annexation of territory in Ukraine.**
 - **A Russian demonstration or battlefield use of a nuclear weapon, or use of chemical weapons.**³²
 - **A nuclear or radiological accident at the Zaporizhzhia Nuclear Power Plant that is actually or perceived to be partially Russia’s fault.**
- Escalatory Ukrainian actions mistaken for or believed to be conducted in concert with Western countries also have the potential to lead to US/NATO-Russian escalation.

It may be possible that **vertical escalation is even harder for both the US/NATO countries and Russia to manage**, as both sides have a vested interest in either “winning” the conflict or in supporting Kyiv in its effort to defend itself. Intensification of the conflict is in many ways unavoidable, as long as each party keeps fighting. Each side’s theory of victory involves the other side’s defeat, capitulation, or retreat. The US has publicly reiterated that its end goal is to help provide Ukraine the strongest possible position to end Russian aggression, “whether or not the fighting continues, or whether or not they decide to go to the negotiating table,” adding, “Ukraine is going to decide what victory’s going to look like.”³³ Meanwhile, Moscow has characterized the West’s support of Ukraine as intending “to inflict strategic defeat on Russia.”³⁴ Moscow’s own war aims have evolved from the initial goal of “demilitarizing and

³⁰ Lt Col Tyson Wetzel and Barry Pavel, “What Are the Risks and Benefits of US/NATO Military Options in Ukraine? Our Strategic Risk Calculator Has Answers,” Atlantic Council, Mar. 9, 2022, https://www.atlanticcouncil.org/wp-content/uploads/2022/03/Risks_and_Benefits_Ukraine.pdf.

³¹ “Putin says Western sanctions are akin to declaration of war” Reuters, March 5, 2022, <https://www.reuters.com/world/europe/putin-says-western-sanctions-are-akin-declaration-war-2022-03-05/>

³² “President Biden Warns Putin Against Using Nuclear or Chemical Weapons,” *TIME*, Sept. 17, 2022, <https://time.com/6214410/biden-warns-putin-against-using-nuclear-weapons/>.

³³ “A Year in, the U.S. Makes a Pledge: ‘Ukraine Will Decide What Victory Looks Like,’” NPR, Feb. 22, 2023, <https://www.npr.org/2023/02/22/1158720321/ukraine-russia-us-war-defense-secretary-lloyd-austin>.

³⁴ “Presidential Address to Federal Assembly,” Feb. 21, 2023, <http://en.kremlin.ru/events/president/news/70565>.

denazifying Ukraine” to later ensuring the “neutrality” of Ukraine—military, economic, and political.³⁵ On July 29, 2022, Putin stated that the “ultimate aim” of the war in Ukraine is “the liberation of the Donbas, the defense of its people, and the creation of conditions which would guarantee the security of Russia itself.”³⁶ Ukraine’s war aims have been primarily to drive Russian troops out and “de-occupy our whole territory,”³⁷ but have also included the eventual liberation of Crimea.³⁸ As current Ukrainian (with US support) and Russian war aims appear to signify a zero-sum game, viable off-ramps have not readily been identified.

Moreover, it may be that **red lines regarding vertical escalation, at least in this particular conflict, are less easily guessed or understood than those of horizontal escalation.** While it is reasonable to assume that Russia sees direct confrontation with NATO (horizontal escalation) as posing an undeniable risk of nuclear escalation, it may be harder to faithfully intuit Russia’s threat perception absent such clear-cut circumstances. This is partially because the effects of gradual Western vertical escalation have been slow and compounding, rather than immediately escalatory in and of themselves. For example, imagine a scenario months or years from now in which Moscow faces an accumulation of devastating Russian military losses to the point where it feels it is fundamentally threatened, either in national security or political terms. In addition, the cumulative effect of international sanctions has sufficiently undermined the outlook of the Russian economy, increasing pressure on Moscow. This ambiguous set of conditions that cumulatively force Russia to abandon its goals in Ukraine is not only impossible to calibrate from the outside, but poses some degree of risk to crisis stability and nuclear risk. For similar reasons, many have expressed caution toward seeking a humiliating military defeat of Russia.³⁹

An additional observation is that **states may feel more comfortable vertically escalating over extended periods of time, if not immediately**—even if they feel uncomfortable horizontally escalating. For instance, while the Obama administration favored nonlethal aid for Ukraine such as night-vision devices, Humvees, drones, and training assistance following Russian aggression starting in 2014, the Trump administration decided to send Javelin anti-tank missiles.⁴⁰ Over time, the Biden administration has authorized several tranches of military aid to Ukraine, including howitzers, HIMARS, Patriot missile batteries, Bradley armored combat vehicles, and Abrams tanks. Additional types of military aid from the US and European countries are being considered. And, if they feel it may be too risky to act alone, **states may opt to act together to avoid the spotlight being shone on them**

³⁵ “Telephone Conversation with President of France Emmanuel Macron,” Feb. 28, 2022,

<http://en.kremlin.ru/events/president/news/67880>.

³⁶ “Vladimir Putin Answered Journalists’ Questions,” June 29, 2022, <http://en.kremlin.ru/events/president/transcripts/68783>.

³⁷ Olivia Olander, “Ukraine Intends to Push Russia Entirely Out, Zelenskyy says as Counteroffensive Continues,” Politico, Sept. 11, 2022, <https://www.politico.com/news/2022/09/11/ukraine-russia-zelenskyy-counteroffensive-00056059>.

³⁸ “Ukraine War Must End with Liberation of Crimea – Zelensky,” BBC, Aug. 10, 2022, <https://www.bbc.com/news/world-europe-62487303>.

³⁹ “Ukraine war: Russia must be defeated but not crushed, Macron says,” BBC, Feb. 19, 2023, <https://www.bbc.com/news/uk-64693691>.

⁴⁰ Paul McLeary, Erin Banco, and Lara Seligman, “First Javelins. Then HIMARS. Now Patriot. What’s Next?” Politico, Dec. 29, 2022, <https://www.politico.com/news/2022/12/29/himars-patriot-russia-ukraine-biden-00075708>.

individually. For example, Germany agreed to send its Leopard tanks only after the US agreed to also send its Abrams, reportedly over concerns of Russian escalation if Germany were to act alone.⁴¹ The perception may be that individual tranches of aid are not significantly escalatory (though still of material use to Ukraine)—while the iterative, cumulative, compounding escalatory effects of aid are less understood.

This ambiguity associated with Moscow’s vertical escalation red lines creates a wider window for both (1) threat manipulation from Moscow in an effort to broadly deter involvement and aid from the West as well as aggression from Ukraine, and (2) miscalculation on the part of the West if Russian red lines exist but are not well understood, communicated, or believed. This is not to say that Western aid or support to Ukraine is not justified despite the escalation risks—simply that it may be inherently harder to approximate Russian vertical red lines accurately.

Additional escalation factors

In the Russo-Ukrainian war, we see two *additional* major escalation challenges that add ambiguity and may pose heightened risk because of potential fundamental differences in viewpoints and shared concepts. The first is that the **US and Russia may not agree on what constitutes “direct military conflict.”** Russian officials have stated that, given US real-time intelligence sharing with Ukrainian troops,⁴² Western training of Ukrainian troops, and continued Western supply of military aid, the US and NATO *are* directly involved in the war.⁴³ Though there is likely some degree of bluffing in these statements designed to deter further Western support of Ukraine, at what point short of explicit involvement does Russia earnestly view the West as a direct participant in the conflict and begin to treat it as such? This ambiguity effectively threatens to translate a certain unknown degree of vertical escalation into horizontal escalation approaching a potential Russian red line—direct US/NATO-Russia conflict. Where does the threshold for vertical-horizontal translation, whether it is one specific action or the result of a compounding, cumulative effect, lie?

Similarly, a second challenge is that **the two sides do not agree on what constitutes “Russian territory,”** which poses significant ambiguity for horizontal red lines. Russian political officials have repeatedly stated that they consider Crimea Russian and vow to defend it with “all forces and resources available.”⁴⁴ While threatening the use of nuclear weapons to defend four newly annexed Ukrainian territories was not credible, and did not prevent Ukrainian offensives to retake those regions using

⁴¹ Kevin Liptak, Stephanie Halasz, Sophie Tanno, and Sugam Pokharel, “Germany and US Announce Plans to Send Tanks to Ukraine in Major Sign of Support for Kyiv,” CNN, Jan. 25, 2023, <https://www.cnn.com/2023/01/25/europe/german-tanks-ukraine-intl/index.html>.

⁴² “U.S. providing intelligence to Ukraine, officials say,” Reuters, March 3, 2022, <https://www.reuters.com/article/ukraine-crisis-usa-intelligence/u-s-providing-intelligence-to-ukraine-officials-say-idUSL2N2V62MD>

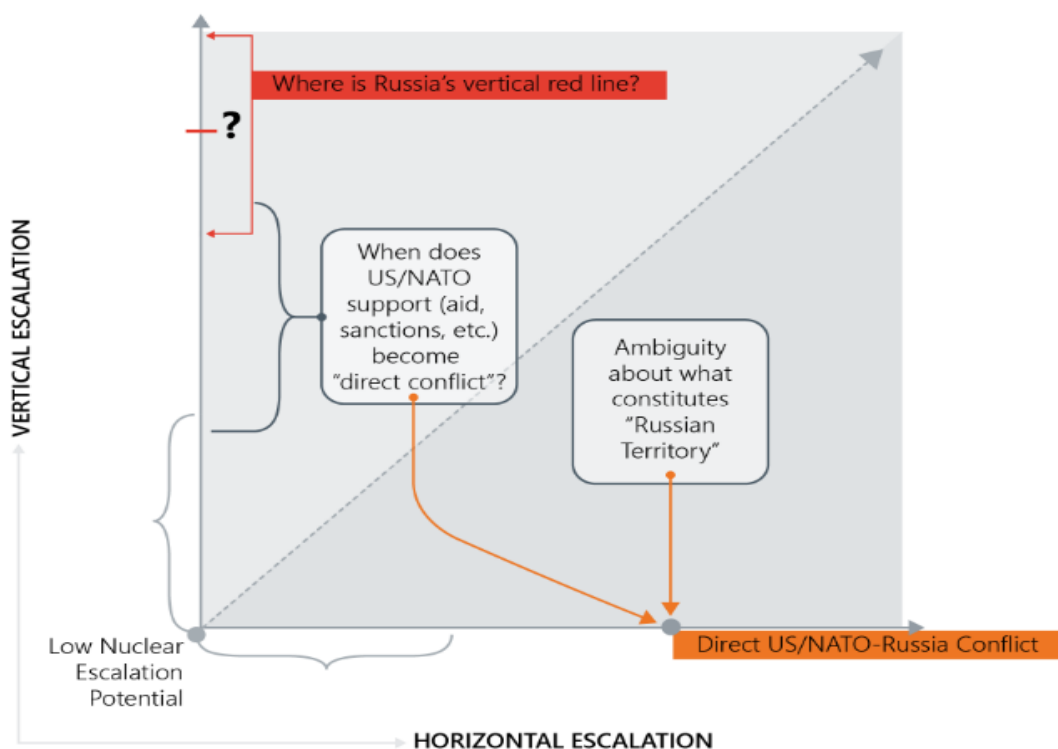
⁴³ Guy Faulconbridge, “Russia Is Now Fighting NATO in Ukraine, Top Putin Ally Says,” Reuters, Jan. 10, 2023, <https://www.reuters.com/world/europe/putin-ally-patrushev-says-russia-is-now-fighting-nato-ukraine-2023-01-10/>; “Russia Says United States Is Directly Involved in Ukraine War,” Reuters, Aug. 2, 2022, <https://www.reuters.com/world/europe/russia-says-united-states-is-directly-involved-ukraine-war-2022-08-02/>.

⁴⁴ “Kremlin Says Any Attack on Annexed Territory Will Be An Attack on Russia,” Reuters, Sept. 30, 2022, <https://www.reuters.com/world/europe/kremlin-says-any-attack-annexed-territory-will-be-an-attack-russia-2022-09-30/>.

Western-supplied HIMARS, the Kremlin genuinely appears to consider Crimea a part of the Russian Federation.⁴⁵ US officials appear to acknowledge that a Western-backed campaign to retake Crimea would elicit a different reaction from Russia; US officials have stressed that the focus in supporting Ukraine, at least in the near term, is to regain its territory in the east and south, and that “the question of Crimea” is something that will be determined down the road.⁴⁶

Both the “territory” and “direct conflict” challenges present additional risk in that one side may not perceive that they are engaging in escalation, or not to the same degree as the other side. This mismatch of expectations, particularly when combined with potential bluffs or empty threats designed to manipulate risk, creates a hazardous, high-stakes operating environment. These dynamics, as well as their interaction with vertical and horizontal escalation, are depicted in Figure 1.

Figure 1. Areas of ambiguity in US/NATO-Russia escalation in the Russo-Ukrainian war



Source: CNA.

As mentioned previously, the categories of vertical and horizontal escalation are imperfect. There are examples that would fit into both categories or that might not cleanly fit into either (e.g., attacks on space

⁴⁵ Russian statements to this effect are detailed in later sections of this report.

⁴⁶ “Sullivan Won’t Say Whether US Will Back Ukraine Retaking Crimea,” Fox News, Feb. 26, 2023, <https://www.foxnews.com/politics/sullivan-wont-say-whether-us-will-back-ukraine-retaking-crimea>.

assets, cyberattacks, etc.). In addition, these categories do not include full lists of potentially escalatory events. The two categories are limited to the Russo-Ukrainian conflict and do not examine the wider tensions and security dilemmas between NATO and Russia that are also concurrent, such as NATO expansion to include Finland and Sweden. The goal of separating US/NATO-Russia escalation pathways into groups is to offer a different way of conceptualizing the nature of the conflict's dynamics as well as consider risks and mitigation strategies.

Understanding Russian nuclear threats

We can assess these escalation dynamics in more depth by examining the nuclear rhetoric issued by Russian officials, but first we must examine the nature of nuclear threats in general. Russia's declaratory policy—or the publicly listed set of circumstances where Moscow says it might consider using nuclear weapons—is limited to the following four scenarios:

1. The receipt of “reliable information” indicating a launch of ballistic missiles attacking the territory of Russia and/or its allies
2. The use of nuclear weapons or other types of weapons of mass destruction by an adversary in the territories of Russia and/or its allies
3. An attack by an adversary against critical Russian governmental or military sites, the disruption of which would undermine nuclear forces' response actions
4. Aggression against Russia with the use of conventional weapons “when the very existence of the state is in jeopardy.”⁴⁷

It should be emphasized that declaratory policies are *nonbinding*, meaning there is nothing limiting Putin to this set of scenarios when considering nuclear use. Many analysts and observers have noted that the threats Putin has been making regarding potential first use of nuclear weapons in Ukraine seemingly fall outside of these scenarios.⁴⁸

In addition to the functional warfighting uses of nuclear weapons, the use or threat of nuclear weapons use can be applied in attempt to “coerce” an adversary. According to Thomas Schelling, there are two types of coercion: deterrence and compellence.⁴⁹ Deterrence is an attempt to prevent an action from an adversary by advertising the negative consequences or punishment that might ensue following such an action (e.g., the threat of nuclear retaliation if an adversary uses a nuclear weapon against you). Conversely, compellence is the attempt to force an adversary to *take* an action (e.g., the use or threat of force to pressure your adversary into a diplomatic agreement). Often, an actor's threat or use of force is attempting to both deter and compel the adversary in some way. We know that compellence, such as the

⁴⁷ Ministry of Foreign Affairs of the Russian Federation, *Basic Principles of State Policy of the Russian Federation on Nuclear Deterrence*, June 2, 2020, https://archive.mid.ru/en/web/guest/foreign_policy/international_safety/disarmament/-/asset_publisher/rp0fiUBmANaH/content/id/4152094.

⁴⁸ Lydia Wachs, “The Role of Nuclear Weapons in Russia's Strategic Deterrence,” SWP Comment 2022/C 68, Nov. 25, 2022, doi:10.18449/2022C68, <https://www.swp-berlin.org/en/publication/the-role-of-nuclear-weapons-in-russias-strategic-deterrence>

⁴⁹ Thomas C. Schelling, *Arms and Influence* (New Haven, CT: Yale University Press, 1966), 35.

pressure to force Russia to give back Ukrainian territory, is typically more difficult to achieve than is deterrence (e.g., deterring an attack on NATO).⁵⁰

Looking broadly at Russian military strategy as well as previous historical events, it is evident that **threatening to use nuclear weapons plays a key role in Moscow's strategy for managing conflict escalation**. Russia adopts an overarching strategy of "strategic deterrence," an interdisciplinary approach of military and nonmilitary means to deter aggression against Russia and prevent war involving Moscow from progressing into increasingly intense phases of conflict, as shown in Figure 2. Though nuclear weapons are just one part of the overall "strategic deterrent," the threat of nuclear use is present in the "adequate damage infliction" phase, also termed the "deterrent damage" phase of conflict, where the infliction of conventional damage is occurring alongside nuclear threats.⁵¹

Analysis suggests that, if Russia believes the Russo-Ukraine war is at the local level of conflict, nuclear threats will continue to be used without indications of actual nuclear use. Instances of nuclear signaling and threats appear to be a longstanding part of Russia's deterrent/coercive strategy.⁵² Russia has used veiled nuclear signaling many times in the past in attempt to prevent local war from escalating into regional war, including the annexation of Crimea in 2014 and in Georgia in 2008.⁵³ Analysis suggests that Russia views the threat of nuclear weapons as having greater deterrent power than conventional threats based on their psychological effect.⁵⁴ However, if Russia believes the war has escalated to the regional level, nonstrategic nuclear weapons could be used against important military-economic targets, or strategic or nonstrategic nuclear weapons may be used to demonstrate resolve—still in an effort to prevent yet further escalation. Only at the large-scale level would Russian forces likely consider the mass use of nonstrategic weapons or the limited use of strategic nuclear weapons. As a few analysts have pointed out, it is difficult to assess what level of war Moscow perceives the Russo-Ukrainian conflict to be in.⁵⁵ Russian military doctrine defines the following levels:

local war - a war in which limited military-political goals are pursued, military operations are conducted within the borders of opposing states and which primarily affects the interests of only these states (territorial, economic, political, and others);

regional war - a war involving several states of the same region, waged by national or coalition armed forces, during which the parties pursue important military-political goals;

large-scale war - a war between coalitions of states or the largest states of the world community, in which the parties pursue radical military-political goals. A large-scale war can be the result of an escalation of an armed conflict, a local or regional war involving a significant number of

⁵⁰ Schelling, *Arms and Influence*.

⁵¹ Michael Kofman, Anya Fink, and Jeffrey Edmonds, *Russian Strategy for Escalation Management*, CNA, April 2020, <https://www.cna.org/reports/2020/04/DRM-2019-U-022455-1Rev.pdf>.

⁵² Kofman and Fink, "Escalation Management and Nuclear Employment in Russian Military Strategy."

⁵³ Dmitry (Dima) Adamsky, "From Moscow with Coercion: Russian Deterrence Theory and Strategic Culture," *Journal of Strategic Studies* 41, nos. 1–2 (2018): 33–60, <https://doi.org/10.1080/01402390.2017.1347872>.

⁵⁴ Kofman and Fink, "Escalation Management and Nuclear Employment in Russian Military Strategy," p. 35.

⁵⁵ "What is Russia's Theory of Victory in Ukraine," Marnix Provoost, March 31, 2023, <https://mwi.usma.edu/what-is-russias-theory-of-victory-in-ukraine/>

states from different regions of the world. This war will require the mobilization of all available material resources and spiritual forces of the participating states.”⁵⁶

While some Western analysts believe Russia perceives the Russo-Ukrainian war is at the local level⁵⁷ perhaps due to the geographical confines of the conflict and the fact that only Ukraine is an official combatant, others have questioned this, particularly given the accusations from the Kremlin that the US and NATO are directly involved.⁵⁸ The challenge of assessing Russian perceptions regarding the scale of this conflict only further highlights the ambiguous nature and escalation potential at play in the war.

Figure 2. Russian model for escalation management



Source: Michael Kofman, Anya Fink, and Jeffrey Edmonds, *Russian Strategy for Escalation Management: Evolution of Key Concepts*, CNA, April 2020, <https://www.cna.org/reports/2020/04/DRM-2019-U-022455-1Rev.pdf>.

⁵⁶ "Military Doctrine of the Russian Federation," [Военная доктрина Российской Федерации], Security Council of the Russian Federation, <http://scrf.gov.ru/security/military/document129/>

⁵⁷ Tweet by Dara Massicot, Jan. 12, 2023,

https://twitter.com/massdara/status/1613628330795745280?s=21&t=q_vEt_AWvuFLx_zJ0YffTA

⁵⁸ Tweet by Shashank Joshi, Sept. 15, 2022, <https://twitter.com/shashj/status/1570384939455250433>.

Russian nuclear threat playbook

Russia's nuclear threats serve both to demonstrate resolve in achieving its war aims and to coerce adversaries. Because these threats are designed to coerce a vast range of actions from various adversaries, Russian officials have used intentionally vague language about their red lines, such as the statements that the world is "balancing on the brink of WWII and nuclear catastrophe."⁵⁹ Thus it can be difficult to know where its red lines (if such formal notions exist) actually lie.

However, in addition to vague threats, Moscow has issued a number of explicit threats that help us identify potential motivations and red lines. Looking at causal linkage threats issued by Putin and other Kremlin officials that follow an "if x, then y" structure, we can deduce the target of the threat and, in certain cases, the intended action or inaction desired. The nuclear threats can be divided into deterring perceived horizontal and vertical escalatory activities by the West and Ukraine.

Russian threats to deter horizontal escalation

Russian officials have issued a number of threats in attempts to deter Western horizontal escalation, such as direct NATO involvement or a US-Russia conflict. On February 24, 2022, when announcing the invasion of Ukraine, Putin stated the following:

I would now like to say something very important *for those who may be tempted to interfere in these developments from the outside*. No matter who tries to stand in our way or, even more so, create threats for our country and our people, they must know that *Russia will respond immediately, and the consequences will be such as you have never seen in your entire history*. No matter how the events unfold, we are ready. All the necessary decisions in this regard have been taken. I hope that my words will be heard.⁶⁰

Three days later, Putin announced that

Western countries are not only taking unfriendly economic actions against our country—I mean the illegitimate sanctions of which everyone is well aware—but *top officials of the leading NATO countries are indulging in aggressive statements directed at our country*. Therefore, I order the defense minister and chief of the General Staff to put the Russian Army's [nuclear] deterrence forces on high combat alert.⁶¹

On March 24, 2022, when asked about the possible Russian use of nuclear weapons, Dmitry Polyanskiy, Russia's Deputy Ambassador to the UN said, "*If Russia is provoked by NATO, if Russia is attacked by NATO, why not? We are a nuclear power.... I don't think it's the right thing to be saying. But it's not the right thing to threaten Russia, and to try to interfere. So, when you're dealing with a nuclear power, of course,*

⁵⁹ "Our People, Our Land, Our Truth': Deputy Chairman of the Security Council of the Russian Federation Dmitry Medvedev – on the results of 2022, which changed the world order" [‘Наши люди, наша земля, наша правда’: заместитель председателя Совета безопасности РФ Дмитрий Медведев - об итогах 2022 года, который изменил миропорядок], RG, Dec. 25, 2022, <https://rg.ru/2022/12/25/nashi-liudi-nasha-zemlia-nasha-pravda.html>.

⁶⁰ "Address by the President of the Russian Federation," Feb. 24, 2022, <http://en.kremlin.ru/events/president/news/67843>, emphasis added.

⁶¹ "Meeting with Sergei Shoigu and Valery Gerasimov," Feb. 27, 2022, <http://en.kremlin.ru/events/president/news/67876>, emphasis added.

you have to calculate all the possible outcomes of your behavior.”⁶² On April 27, 2022, Putin emphasized again in a meeting at the Federal Assembly,

*If someone intends to interfere in the ongoing events from the outside and creates strategic threats for Russia that are unacceptable to us, they should know that our retaliatory strikes will be lightning-fast. We have all the tools for this, such that no one can boast now. And we will not brag, we will use them if necessary. And I want everyone to know about it—we have made all the decisions on this matter.*⁶³

Another attempt to deter horizontal escalation followed Ukrainian President Zelensky’s announcement of a “fast-track” bid to join NATO on September 30, 2022.⁶⁴ Alexander Venediktov, the deputy secretary of Russia’s Security Council, stated: “Kyiv is well aware that *such a step would mean a guaranteed escalation to World War Three. The suicidal nature of such a step is understood by NATO members themselves.*”⁶⁵

In addition, Russia has used nuclear threats to deter attacks against territory it has annexed—Crimea and even parts of eastern Ukraine. With these threats, Russia is attempting to link the Russian homeland—a target set that would undeniably pose a high level of escalation—with additional territory it knows the West does not legally recognize. For example, on June 29, 2022, in an *Argumenti i Fakti* interview, Dmitry Medvedev, deputy chief of Russia’s Security Council, stated that, “*Any attempt to encroach on Crimea is a declaration of war on our country. And if a country that is part of NATO does this, it is a conflict with the entire North Atlantic Alliance,*” which he stated would cause WWII.⁶⁶ On February 4, 2023, Medvedev stated on Twitter, “*Crimea is [Russia]. Attacking Crimea means attacking Russia and escalating the conflict. The Ukrainian gang of drug addicts must understand that such attacks will be met with inevitable retaliation using weapons of any kind.*”⁶⁷ On the same day, when asked in an interview how Russia would respond if Ukraine attacked Crimea or deep inside Russia, he stated: “*We do not impose any restrictions on ourselves and, depending on the nature of the threats, we are ready to use all types of weapons. In accordance with our doctrinal documents, including the Basic Principles of Nuclear Deterrence, I can assure you, the response will be quick, harsh, and convincing.*”⁶⁸ Even as early as 2014,

⁶² “Russian Diplomat: If NATO Threatens Us We Have the Right to Press the Nuclear Button,” Sky News, Mar. 25, 2022, <https://news.sky.com/story/russian-diplomat-if-nato-threatens-us-we-have-the-right-to-press-the-nuclear-button-12573773>, emphasis added.

⁶³ “Meeting with the Council of Legislators,” Apr. 27, 2022, <http://kremlin.ru/events/president/news/68297>, emphasis added.

⁶⁴ Isabelle Khurshudyan and Emily Rauhala, “Zelensky Pushes ‘Accelerated’ Application for Ukraine NATO membership,” *Washington Post*, Sept. 30, 2022, <https://www.washingtonpost.com/world/2022/09/30/ukraine-application-nato-russia-war/>.

⁶⁵ Guy Faulconbridge and Lidia Kelly, “Russian Official Warns of World War Three if Ukraine Joins NATO,” Reuters, Oct. 13, 2022, <https://www.reuters.com/world/europe/admission-ukraine-nato-can-lead-third-world-war-russian-official-2022-10-13/>, emphasis added.

⁶⁶ “Dmitry Medvedev, “The Nuclear-Free Status of the Baltic Will Become a Thing of the Past” [Дмитрий Медведев — aif.ru: «Безъядерный статус Балтики уйдёт в прошлое»], *Argumenti i Fakti*, June 28, 2022, https://aif.ru/politics/world/dmitriy_medvedev_aif_ru_bezyadernyy_status_baltiki_uydyot_v_proshloe, emphasis added.

⁶⁷ Tweet from Dmitry Medvedev, Feb. 4, 2023, <https://twitter.com/MedvedevRussiaE/status/1621914473270239233>, emphasis added.

⁶⁸ Telegram post from Dmitry Medvedev, Feb. 4, 2023, <https://t.me/FridrihShow/7596>, emphasis added.

Russian officials have been threatening nuclear use in response to an attack on Crimea. For example, Foreign Minister Sergey Lavrov said, “*If it comes to aggression against Russian territory, which Crimea and Sevastopol are parts of, I would not advise anyone to do this,*” adding, “*We have the doctrine of national security, and it very clearly regulates the actions, which will be taken in this case.*”⁶⁹ In 2015, Putin acknowledged he was ready to raise the combat readiness of the strategic nuclear forces in order to annex Crimea, if needed.⁷⁰

Russia has attempted to stretch this approach to include newly annexed territories following sham referenda in eastern Ukraine. For example, On September 21, 2022, Putin stated that Russia may use nuclear weapons to defend these territories should it need to. He added, “*Our country has different types of weapons as well, and some of them are more modern than the weapons NATO countries have. In the event of a threat to the territorial integrity to our country and to defend Russia and our people, we will certainly make use of all weapon systems available to us. This is not a bluff.*”⁷¹ The potential use of “including strategic nuclear weapons and weapons based on new principles” for protection of the newly annexed territories was reiterated a day later by Medvedev.⁷²

Overall, Russian threats to deter US and NATO-backed attacks on its homeland have been successful, if only because of the acknowledged risk of escalation such an attack would bring. The US has attached limitations to its long-range artillery systems aid and on potential F-16 shipments to prevent being perceived as involved in an attack on Russia. US officials have also approached the Crimean Peninsula with some degree of caution and restraint, and have stressed that support for Ukraine, at least in the near term, is to regain its territory in the east and south that Ukraine “is currently focused on.”⁷³ US National Security Advisor Jake Sullivan has stated, “The question of Crimea, and the question of what happens down the road is something that we will come to.” However, when it comes to illegally annexed “Russian” territory, these threats are only as effective as they are convincing: while there is reason to believe that Russia truly considers Crimea its rightful territory and would risk significant stakes to maintain ownership in this land-grab over which it claims historical ownership, US officials are far less concerned about the escalation potential of targeting the four annexed territories in the east. Secretary Blinken called the “sham referenda” a “complete farce” and stated, “This territory is and will remain Ukraine, and Ukraine has every right to defend its land, to defend its people, and to take back the

⁶⁹ Dmitry Sudakov, “No One Should Even Try to Attack Crimea—Russian FM Lavrov,” *Pravda*, July 9, 2014, http://english.pravda.ru/russia/politics/09-07-2014/128011-attack_crimea_lavrov-0/, emphasis added.

⁷⁰ “Ukraine conflict: Putin ‘was ready for nuclear alert,’” BBC, Mar. 15, 2015, <https://www.bbc.com/news/world-europe-31899680>.

⁷¹ “Address by the President of the Russian Federation,” Sept. 21, 2022, <http://en.kremlin.ru/events/president/news/69390>, emphasis added.

⁷² Telegram post by Dmitry Medvedev, Mar. 20, 2022, https://t.me/s/medvedev_telegram.

⁷³ “Sullivan Won’t Say Whether US Will Back Ukraine Retaking Crimea,” Fox News, Feb. 26, 2023, <https://www.foxnews.com/politics/sullivan-wont-say-whether-us-will-back-ukraine-retaking-crimea>.

territory that Russia has seized from it.”⁷⁴ Such statements have been followed with Ukrainian use of HIMARS against Russian military bases in the Donbas.⁷⁵

Russian threats to deter vertical escalation

Russian officials have issued a large number of nuclear threats designed to deter vertical escalation, such as the supply of Western aid to Ukraine. In many of these threats, Moscow attempted to manipulate the risk associated with the ambiguity between the West’s indirect versus direct involvement. For example, on September 2, 2022, Deputy Foreign Minister Sergei Ryabkov warned Washington against supplying long-range weapons to Ukraine, saying: “We have repeatedly warned the U.S. about the *consequences that may follow if the U.S. continues to flood Ukraine with weapons.... It effectively puts itself in a state close to what can be described as a party to the conflict.*” He warned that “a very narrow margin that separates the U.S. from becoming a party to the conflict *mustn’t create an illusion for rabid anti-Russian forces that everything will remain as it is if they cross it.*” In the same speech, he mentioned that Russian military doctrine allows the use of nuclear weapons in certain instances.⁷⁶ Similarly, on May 12, 2022, Medvedev posted the following on Telegram:

I want to articulate once again very clearly things that are so obvious to all reasonable people. 1. *The pumping of Ukraine by NATO countries with weapons, the training of its troops to use Western equipment, the dispatch of mercenaries and the conduct of exercises by the countries of the Alliance near our borders increase the likelihood of a direct and open conflict between NATO and Russia instead of their ‘war by proxy.’* 2. Such a conflict always *has the risk of turning into a full-fledged nuclear war.* 3. This would be a catastrophic scenario for everyone.⁷⁷

On January 22, 2023, State Duma Chairman Vyacheslav Volodin said that governments giving more powerful weapons to Ukraine could cause a “global tragedy that would destroy their countries....Supplies of offensive weapons to the Kyiv regime would lead to a *global catastrophe. If Washington and NATO supply weapons that would be used for striking peaceful cities and making attempts to seize our territory as they threaten to do, it would trigger a retaliation with more powerful weapons.*”⁷⁸ And on January 19, 2023, Medvedev cryptically stated the following in an interview: “The defeat of a nuclear power in a conventional war may trigger a nuclear war....Nuclear powers have never lost major

⁷⁴ “Biden Vows Russia Won’t ‘Get Away With’ Ukraine Annexation,” AP News, Sept. 30, 2022, <https://apnews.com/article/us-russia-sanctions-45ad79b7e4965539da8ff10eda828220>.

⁷⁵ Matthew Mpoke Bigg, Anatoly Kurmanaev and Richard Pérez-Peña, “Deadly Strike on Russians in Ukraine Exposes Moscow’s Military Failings,” *New York Times*, Jan. 2, 2023, <https://www.nytimes.com/2023/01/02/world/europe/ukraine-russia-himars-makiivka.html>.

⁷⁶ “Russia Warns US Off Sending Long-Range Weapons to Ukraine,” AP News, Sept. 2, 2022, <https://apnews.com/article/russia-ukraine-nuclear-weapons-government-and-politics-c43d68369418ed2507f5432074d89932>, emphasis added.

⁷⁷ Telegram post by Dmitry Medvedev, Mar. 20, 2022, https://t.me/s/medvedev_telegram, emphasis added.

⁷⁸ “Russia Official Warns West of ‘Global Catastrophe’ for Arming Ukraine,” Jan. 22, 2023, PBS Newshour, <https://www.pbs.org/newshour/world/russia-official-warns-west-of-global-catastrophe-for-arming-ukraine>, emphasis added.

conflicts on which their fate depends.”⁷⁹ On May 20, 2023, responding to news that Washington will endorse the supply of US-made F-16s to Ukraine, Russian Deputy Foreign Minister Alexander Grushko stated, “Movement is under way on the so-called escalation ladder....This involves enormous risks for [NATO].”⁸⁰ On May 27, 2023, Russian Ambassador to the UK Andrew Kelin stated that the length of the Russo-Ukrainian war “will depend on the efforts of escalation being undertaken by the NATO countries....Tanks provided, aircrafts provided....*Sooner or later this escalation may get a new dimension, which we do not need, and we do not want.*”⁸¹

While Russia attempted to characterize Western military aid as *direct* US/NATO-Russian conflict, which would pose undeniable escalation risks, these threats were largely unsuccessful, perhaps because of the previously mentioned incremental nature of the tranches of aid, the united approach in their supply, and the lack of credibility that training troops or supplying Ukraine with some forms of lethal aid would trigger a Russian response. However, whether self-deterred from the risk of escalation, or in response to Russian threats, Washington has attached strings to its supply of some types of aid that could be used to target the Russian homeland, such as HIMARS and F-16s.

Additional strategies in Russian nuclear threats

Additional trends in strategic messaging can be observed in assessing Moscow’s nuclear threats. For example, a frequent strategy of Russian signaling during the Russo-Ukrainian conflict is one of “Dr. Jekyll and Mr. Hyde.”⁸² In such a strategy, **Moscow attempts to offset the irresponsibility associated with its nuclear behavior with statements that make Russia appear like a responsible nuclear actor.** On October 6, 2022, Russian Foreign Ministry spokeswoman Maria Zakharova said Russia is “fully committed” to avoiding a nuclear conflict: “The Russian Federation, to the full extent, sticks to the principle of not allowing a nuclear war to unfold....We have said and confirmed that many times.”⁸³ On other occasions, Russian officials have stated that “Russia is strictly and consistently guided by the truth that a nuclear war can never be won and should never be fought” and “unfailingly committed to the noble goal of building a world free of nuclear weapons.” Additional examples include Putin’s December 7, 2022, assertion that Russia would “under no circumstances” use nuclear weapons first, saying, “*We have not gone mad, we are aware of what nuclear weapons are....We aren't about to run around the world brandishing this weapon like a knife.*”⁸⁴

⁷⁹ “Putin Ally Warns NATO of Nuclear War if Russia Is Defeated in Ukraine,” Reuters, Jan. 19, 2023, <https://www.reuters.com/world/europe/putin-ally-medvedev-warns-nuclear-war-if-russia-defeated-ukraine-2023-01-19/>.

⁸⁰ “Russia Issues Warning to West Over F-16 Jets: ‘Escalation Scenario,’” *Newsweek*, May 20, 2023, <https://www.newsweek.com/russia-issues-warning-west-f16-jets-escalation-1801576>.

⁸¹ “Ukraine war: Russian Ambassador Andrei Kelin issues warning of escalation in Ukraine,” BBC, May 27, 2023, <https://www.bbc.com/news/uk-politics-65720980>, emphasis added.

⁸² This phenomenon is also described as “Good Cop, Bad Cop” in an article by Russia Matters staff, “In Nuclear Messaging to West and Ukraine, Putin Plays Bad and Good Cop,” *Russia Matters*, Dec. 21, 2022, <https://www.russiamatters.org/blog/nuclear-messaging-west-and-ukraine-putin-plays-bad-and-good-cop>.

⁸³ “Despite Recent Statements, Russia Says It’s Committed To Avoiding Nuclear War,” *Radio Free Europe/Radio Liberty*, Oct. 5, 2022, <https://www.rferl.org/a/russia-ukraine-nuclear-weapons-zakharova/32068378.html>,

⁸⁴ “Putin: Nuclear Risk Is Rising, But We Are Not Mad,” BBC, Dec. 7, 2022, <https://www.bbc.com/news/world-europe-63893316>, emphasis added.

A second strategy Moscow has frequently deployed is to divert or deflect blame from the international community. In such attempts, the Kremlin highlights perceived irresponsible, reckless wrongdoings on the part of the West or the United States—commonly referred to as “whataboutism.” For example, on March 3, 2022, Lavrov said in an online interview that while “it is clear that World War Three can only be nuclear...I would like to point out that it's in the heads of Western politicians that the idea of a nuclear war is spinning constantly, and not in the heads of Russians.”⁸⁵ On August 15, 2022, the Russian Embassy posted on Facebook:

We have taken note of the sweeping rhetoric of the administration that Russia's actions do not correspond to the status of a responsible nuclear power. Our country faithfully fulfills its obligations as a nuclear-weapon state and makes every effort to reduce nuclear risks....Against this background, *it is strange to hear accusations of irresponsibility, in particular from a country that in 1945 subjected the peaceful citizens of Hiroshima and Nagasaki to atomic bombings.* This thoughtless “demonstration of power” claimed the lives of over 450 thousand people and practically wiped Japanese cities off the face of the Earth. Today, the United States continues to act with no regard to other countries’ security and interests, which does contribute to an increase in nuclear risks. The US steps to further engage in a hybrid confrontation with Russia in the context of the Ukrainian crisis are fraught with unpredictable escalation and a direct military clash of nuclear powers....*We suggest that Washington should take a closer look at its own nuclear policy* instead of making unfounded accusations against the countries whose worldviews do not coincide with the American ones.⁸⁶

Twice more Putin referred to US nuclear use in WWII: first on September 30, 2022, and then on October 17 at the Valdai Forum, where he stated the following:

*The only country in the world which has used nuclear weapons against a non-nuclear state was the United States of America; they used it twice against Japan. What was the goal? There was no military need for it at all. What was the military practicability to use nuclear weapons against Hiroshima and Nagasaki, against civilians? Had there been a threat to the US territorial integrity? Of course not.*⁸⁷

Interestingly, Moscow has also attempted to divert blame onto the US while hinting that it may resume nuclear testing itself. In his February 21, 2023, address to the Federal Assembly, Putin said,

We are aware of the fact that certain types of US nuclear weapons are reaching the end of their service life. In this regard, *we know for certain that some politicians in*

⁸⁵ “Russia’s Lavrov Accuses West of Fixating on Nuclear War,” *Moscow Times*, Mar. 3, 2022, <https://www.themoscowtimes.com/2022/03/03/russias-lavrov-accuses-west-of-fixating-on-nuclear-war-a76735>.

⁸⁶ Facebook post by The Embassy of Russia in the USA, Aug. 15, 2022, <https://www.facebook.com/RusEmbUSA/posts/pfbid02chbPLt1xDemX7nVanAdV3zuhiiLzSXB9zCpAoZ6X4KUFgoBLyp5tsJbuC21q95l>, emphasis added.

⁸⁷ “Statement by the Russian Federation on the Prevention of Nuclear War” [Заявление Российской Федерации о предотвращении ядерной войны], Ministry of Foreign Affairs of the Russian Federation, Feb. 11, 2022, https://www.mid.ru/ru/foreign_policy/news/1836575/, emphasis added.

Washington are already pondering live nuclear tests, especially since the United States is developing innovative nuclear weapons.... Given these circumstances, the Defense Ministry and Rosatom [Russia's State Atomic Energy Corporation] must make everything ready for Russia to conduct nuclear tests. *We will not be the first to proceed with these tests, but if the United States goes ahead with them, we will as well.* No one should harbor dangerous illusions that global strategic parity can be disrupted.⁸⁸

Some US analysts believe that Putin may either conduct a nuclear test as part of coercive signaling in the context of the Russo-Ukrainian war, or to assess the reliability of its decades-old warheads.⁸⁹ The 2022 US Nuclear Posture Review clearly states that the US “does not envision or desire a return to nuclear explosive testing” and that it “supports the Comprehensive Nuclear Test-Ban Treaty (CTBT) and is committed to working to achieve its entry into force.”⁹⁰

US and NATO responses

There are a variety of lasting impacts of Russia's invasion of Ukraine on US/NATO-Russian crisis stability. In response to aggressive Russian actions, NATO has taken several security measures designed both to assure members and to deter Russian aggression. In addition to the Western supply of aid to Ukraine, key impacts on US/NATO-Russian crisis stability as a result of Russia's invasion of Ukraine include the following:

- **The strengthening of NATO's eastern flank**
 - NATO rapidly established four new multinational battle groups in Bulgaria, Hungary, Romania, and Slovakia, in addition to the existing battle groups in Estonia, Latvia, Lithuania, and Poland.⁹¹
- **Significant changes to NATO defenses and strategy**
 - Following NATO's Madrid Summit in June 2022, the allies agreed to a “fundamental shift” in NATO's deterrence and defense strategies. These included adding more forward defenses such as prepositioned equipment, supplies, and capabilities; transforming the NATO Response Force; and increasing the number of high-readiness forces from 40,000 to more than 300,000. According to NATO, “All of this constitutes the biggest overhaul of Allied collective defense and deterrence since the Cold War.”⁹²

⁸⁸ “President's Address to the Federal Assembly,” Feb. 21, 2023, <http://kremlin.ru/events/president/news/70565>, emphasis added.

⁸⁹ William Courtney, “Putin Could Escalate with Nuclear Testing” The Rand Blog, March 6, 2023, <https://www.rand.org/blog/2023/03/putin-could-escalate-with-nuclear-testing.html>; Cheryl Rofer, *Foreign Policy*, “Nuclear Tests May Be Back on Moscow's Agenda” May 15, 2023, <https://foreignpolicy.com/2023/05/15/nuclear-testing-russia-united-states-nonproliferation-weapons/>

⁹⁰ US Department of Defense, *2022 National Defense Strategy, Including the 2022 Nuclear Posture Review and the 2022 Missile Defense Review*, Oct. 27, 2022, https://s3.documentcloud.org/documents/23205180/2022_national_defense_strategy_npr_mdr.pdf.

⁹¹ “NATO's Response to Russia's invasion of Ukraine,” North Atlantic Treaty Organization, accessed Mar. 20, 2023, https://www.nato.int/cps/en/natohq/topics_192648.htm.

⁹² “NATO's Response to Russia's invasion of Ukraine.”

- According to NATO, the allies are also increasing the resilience of their societies and infrastructure. This includes “enhancing cyber capabilities and defenses, and providing support to each other in the event of cyberattacks. Following the sabotage of the Nord Stream pipelines, Allies have doubled their naval presence in the Baltic and North Seas, and are increasing security around other key installations and pieces of critical infrastructure. NATO members are stepping up intelligence sharing and surveillance across all domains, to ensure the protection of critical undersea and energy infrastructure. Allies are also enhancing their preparedness for chemical, biological, radiological and nuclear threats, strengthening their energy security, and boosting resilience to hybrid threats, including disinformation.”⁹³
- Additionally, following Russia’s invasion of Ukraine, almost all NATO members have increased their defense spending.⁹⁴
- **Finland’s accession and Sweden’s probable accession into NATO**
 - This will present operational opportunities, such as the potential for new nuclear basing and deployment areas, as well as an overall bolstering of NATO’s eastern flank and presence in the Baltic Sea and Arctic circle.⁹⁵ With Finland’s recent accession into the alliance, Russia’s border with NATO has more than doubled. Russia has vowed that it will respond militarily to such an act: Kremlin spokesperson Dmitry Peskov similarly commented that, should the two countries join NATO, Russia would have to “make our Western flank more sophisticated in terms of ensuring our security.”⁹⁶ And in December 2022, Russian Minister of Defense Sergei Shoigu stated that Russia would be forming two new military districts, two new airborne divisions, and reorganizing several motor rifle brigades into larger divisions.

Meanwhile, the US and NATO made concurrent efforts to continue standard deterrence mission activities responsibly. These notably included the cancellation of a previously scheduled intercontinental ballistic missile (ICBM) flight test, slated for March 2022, in the wake of several Russian nuclear threats at the beginning of the war.⁹⁷ NATO has carried on with its regularly scheduled drills, such as the Steadfast Noon nuclear exercise. NATO Secretary General Jens Stoltenberg commented before Steadfast Noon, “Now is the right time to be firm and to be clear that NATO is there to protect and defend all allies....I think it would send a very wrong signal if we suddenly now cancelled a routine, long-time-planned exercise because of the war in Ukraine....So if we now created the grounds for any

⁹³ “NATO’s Response to Russia’s invasion of Ukraine.”

⁹⁴ “Dark Arctic: NATO allies wake up in the Arctic region,” Reuters, Nov. 16, 2023, <https://www.reuters.com/graphics/ARCTIC-SECURITY/zgvobmblrpd/>

⁹⁵ Jonathan Masters, “How NATO Will Change if Finland and Sweden Become Members,” Council on Foreign Relations, June 29, 2022, <https://www.cfr.org/in-brief/how-nato-will-change-if-finland-and-sweden-become-members>.

⁹⁶ “Russia Says It Would Have to ‘Rebalance’ if Finland and Sweden Join NATO,” Reuters, Apr. 7, 2022, <https://www.reuters.com/world/europe/russia-says-it-would-have-rebalance-if-finland-sweden-join-nato-2022-04-07/>.

⁹⁷ “Exclusive: U.S. Cancels ICBM Test Due to Russia Nuclear Tensions,” Reuters, Apr. 1, 2022, <https://www.reuters.com/business/aerospace-defense/exclusive-us-cancels-icbm-test-due-russia-nuclear-tensions-2022-04-01/>.

misunderstanding, miscalculation in Moscow about our willingness to protect and defend all allies, we would increase the risk of escalation and that's the last thing we will do.”⁹⁸ And while emphasizing the need to take Russian nuclear threats seriously, US officials have continually stressed that there is no change in either US or Russian nuclear posture, nor cause for immediate alarm.⁹⁹

In addition to the military and economic measures taken by NATO and the US, there have been a variety of official responses from the West regarding Russia’s nuclear threats. Just as Russia has been issuing threats and signaling to deter the West, the US and NATO have been issuing threats and signaling in order to deter Russia’s taking certain escalatory actions. Key strategies appear to be highlighting the irresponsibility of the Kremlin’s nuclear threats, promising the threat of global exclusion and international pariahdom should Moscow use nuclear weapons, issuing private warnings to de-escalate, and leveraging strategically ambiguous threats of conventional or nuclear escalation in the event that (1) Russia uses nuclear weapons, or (2) attacks a NATO country.

US and NATO threats to deter horizontal escalation

Following Russia’s invasion of Ukraine, US and NATO officials have regularly issued statements designed to deter horizontal escalation, such as an attack on a NATO country.¹⁰⁰ In order to deter such attacks, officials highlight the indivisibility of the alliance, as well as the resolve to respond if attacked. For example, on March 8, 2022, NATO Secretary General Stoltenberg warned Russia not to target NATO countries’ supply lines outside of Ukraine, saying

The allies are helping Ukraine uphold their right for self-defense, which is enshrined in the UN charter. Russia is the aggressor and Ukraine is defending itself...There is a war going on in Ukraine and, of course, supply lines inside Ukraine can be attacked....*An attack on NATO territory, on NATO forces, NATO capabilities, that would be an attack on NATO....If there is any attack against any NATO country, NATO territory, that will trigger Article 5.*¹⁰¹

Similarly, in a speech on March 26, 2022, Biden said: “*Don’t even think about moving on one single inch of NATO territory. We have a sacred obligation under Article 5 to defend each and every inch of NATO*

⁹⁸ “Pre-Ministerial Press Conference,” North Atlantic Treaty Organization, Oct. 11, 2022, https://www.nato.int/cps/en/natohq/opinions_208037.htm; Hans M. Kristensen, “NATO and Russia Exercises Rattle Nuclear Swords Amid Ukraine War,” *Russia Matters*, Oct. 14, 2022, <https://www.russiamatters.org/blog/nato-and-russia-exercises-rattle-nuclear-swords-amid-ukraine-war>.

⁹⁹ Joe Gould, “No Changes Coming to US Nuclear Posture After Russian Threat,” *Defense News*, Mar. 1, 2022, <https://www.defensenews.com/pentagon/2022/03/01/no-changes-coming-to-us-nuclear-posture-after-russian-thr>; “No change to U.S. nuclear posture due to Russia threats, Pentagon says”, *Reuters*, September 27, 2022, <https://www.reuters.com/world/no-change-us-nuclear-posture-due-russia-threats-pentagon-says-2022-09-27/> eat/.

¹⁰⁰ Such statements are numerous and not all captured here.

¹⁰¹ “NATO Chief Warns Russia Away from Attacking Supply Lines Supporting Ukraine,” *CBC*, Mar. 9, 2022, <https://www.cbc.ca/news/politics/ukraine-russia-putin-stoltenberg-nato-1.6377675>, emphasis added.

*territory with the full force of our collective power.*¹⁰² He reiterated these statements in February 2023, again highlighting that NATO’s mutual defense pact is “sacred” and vowed to “*defend literally every inch of NATO.*”¹⁰³

US officials have also warned Moscow against the “dangerously provocative” decision to base Russian nuclear weapons in Belarus, which, if actualized, would be another instance of Russian horizontal escalation.¹⁰⁴ European Union High Representative Josep Borrell threatened further sanctions should such a development occur.¹⁰⁵

US/NATO threats to deter vertical escalation

In addition, US and NATO officials have issued ample threats designed to deter vertical escalation—namely, Russia’s using a nuclear weapon in Ukraine. These threats have tended to be strategically ambiguous, but they hint at significant, if undefined, escalation in response. Arguably, the strategy here has been to erase any Russian understanding of a distinction between lower-yield, shorter-range “non-strategic” or “tactical” nuclear weapons and larger-yield “strategic” varieties to deter any Russian attempt at controlling escalation through limited nuclear employment.¹⁰⁶ These threats also show that the US and NATO resist attempts of intimidation and coercion from the Kremlin.

For example, Biden wrote in a May 31, 2022, *New York Times* op-ed, “Let me be clear: *Any use of nuclear weapons in this conflict on any scale would be completely unacceptable to us as well as the rest of the world and would entail severe consequences.*”¹⁰⁷ In a September 16 interview, Biden warned that Putin’s use of tactical nuclear weapons or chemical weapons in Ukraine would “*change the face of war unlike anything since World War II.*” Biden declined to specify exactly how the US would respond, but noted that the

¹⁰² “Remarks by President Biden on the United Efforts of the Free World to Support the People of Ukraine,” The White House, Mar. 26, 2022, <https://www.whitehouse.gov/briefing-room/speeches-remarks/2022/03/26/remarks-by-president-biden-on-the-united-efforts-of-the-free-world-to-support-the-people-of-ukraine/>, emphasis added.

¹⁰³ “Biden Calls Putin’s Suspension of Nuclear Arms Treaty a ‘Big Mistake,’” PBS NewsHour, Feb. 22, 2023, <https://www.pbs.org/newshour/politics/biden-calls-putins-suspension-of-nuclear-arms-treaty-a-big-mistake>, emphasis added.

¹⁰⁴ “U.S. warns Moscow, Minsk against deploying nuclear arms in Belarus”, Reuters, March 3, 2023, <https://www.reuters.com/world/europe/us-warns-moscow-minsk-against-deploying-nuclear-arms-belarus-2022-03-03/>

¹⁰⁵ “EU threatens more sanctions if Russia moves nukes to Belarus”, Euronews, March 27, 2023, <https://www.euronews.com/2023/03/26/putin-says-russia-will-station-tactical-nukes-in-belarus-sending-a-clear-warning-to-the-we>.

¹⁰⁶ This purported Russian strategy and ensuing debate among nuclear policy analysts in the US has confusingly been termed “escalate to de-escalate.” For information on Russian strategies for escalation management, see Michael Kofman, Anya Fink, and Jeffrey Edmonds, *Russian Strategy for Escalation Management: Evolution of Key Concepts*, CNA, Apr. 2020, <https://www.cna.org/reports/2020/04/DRM-2019-U-022455-1Rev.pdf>.

¹⁰⁷ President Joe Biden, “President Biden: What America Will and Will Not Do in Ukraine,” *New York Times*, May 31, 2022, <https://www.nytimes.com/2022/05/31/opinion/biden-ukraine-strategy.html>, emphasis added.

response would be “consequential” and would depend “on the extent of what they do.”¹⁰⁸ At an October 3, 2022, fundraiser, Biden referenced the potential of Russian nuclear use in Ukraine, saying, “I don’t think there’s any such thing as the ability to easily [use] a tactical nuclear weapon and not end up with Armageddon.”¹⁰⁹ On October 25, 2022, Biden warned that Russian tactical nuclear use would be “an incredibly serious mistake.”¹¹⁰ In an October 2, 2022, interview, NATO Secretary General Stoltenberg warned about the “severe consequences for Russia” if Putin uses nuclear weapons in Ukraine.¹¹¹ On October 13, 2022, when asked about potential Russian nuclear use, Stoltenberg warned that, “We will not go into exactly how we will respond, but of course this will fundamentally change the nature of the conflict. It will mean that a very important line has been crossed....Even any use of a smaller nuclear weapon will be a very serious thing, fundamentally changing the nature of the war in Ukraine, and of course that would have consequences.”¹¹²

Meanwhile, according to US National Security Advisor Sullivan, US officials have met with their Russian counterparts directly to communicate the escalatory consequences of nuclear use. In two cases, these threats were reiterated publicly. For example, on September 25, 2022, Sullivan stated in a CBS interview that Putin’s nuclear warnings are

a matter that we have to take deadly seriously....We have communicated directly, privately to the Russians at very high levels that there will be catastrophic consequences for Russia if they use nuclear weapons in Ukraine. We have been clear with them and emphatic with them that the United States will respond decisively alongside our allies and partners and we have been clear and specific about what that will entail.¹¹³

In a CNN interview on October 2, 2022 Sullivan reiterated: “I have said before that we have had the opportunity to communicate directly to Russia a range of consequences for the use of nuclear weapons and the kinds of actions the United States would take. I have also said before that we are not going to

¹⁰⁸ “President Biden Warns Vladimir Putin Not to Use Nuclear Weapons: ‘Don’t. Don’t. Don’t,’” CBS News, Sept. 16, 2022, <https://www.cbsnews.com/news/president-joe-biden-vladimir-putin-60-minutes-2022-09-16/>, emphasis added.

¹⁰⁹ Yasmeen Abutaleb, Karen DeYoung, and Paul Sonne, “‘Armageddon’ warning reflects Biden’s instincts about Putin,” *Washington Post*, Oct. 7, 2022, <https://www.washingtonpost.com/politics/2022/10/07/biden-putin-nuclear-armageddon/>, emphasis added.

¹¹⁰ David Sanger, “Biden Says Russian Use of a Nuclear Weapon Would Be a ‘Serious Mistake,’” *New York Times*, Oct. 25, 2022, <https://www.nytimes.com/2022/10/25/us/politics/biden-russia-ukraine-nuclear.html>, emphasis added.

¹¹¹ “NATO’s Jens Stoltenberg Warns Russia of ‘Severe Consequences’ If It Uses Nuclear Weapons,” *Financial Times*, Oct. 2, 2022, <https://www.ft.com/content/36ca9f0b-d287-47ac-8944-36171dbd9a10>, emphasis added.

¹¹² Lorne Cook, “NATO Chief Warns Russia Not to Cross ‘Very Important Line,’” AP News, Oct. 13, 2022, <https://apnews.com/article/russia-ukraine-putin-nato-government-and-politics-moscow-4b8db123007dde5c1f859bb8134b7dd5>, emphasis added.

¹¹³ “Kyiv’s Western Allies Boost Nuclear Deterrence after Putin’s Threats,” *Financial Times*, Sept. 25, 2022, <https://www.ft.com/content/e7212f93-6635-40eb-a356-c8e1bb14cea3>, emphasis added.

telegraph these things publicly.”¹¹⁴ These statements retain some degree of ambiguity while conveying that Russian nuclear escalation will not yield the intended result.

Normative coercion

Other official statements have highlighted the irresponsibility of the Kremlin’s nuclear threats. Such statements have two audiences and intentions: First, to reinforce to the Kremlin the normative cost of its actions and curb potential further escalatory behavior. Second, whose audience is the broader international community, to build scorn and strengthen norms against irresponsible Russian nuclear behavior. For example, on June 2, Assistant Secretary of State for Arms Control, Verification, and Compliance Mallory Stewart said, “We must highlight Russia’s disdain and marshal the support of the entire international community to condemn Russia for its reckless nuclear saber-rattling.”¹¹⁵ And on September 16, 2022, Biden warned Russia against nuclear use, saying, “*They’ll become more of a pariah in the world than they ever have been.*”¹¹⁶ Russia’s nuclear rhetoric has been condemned as “irresponsible,” “reckless,” or “dangerous” by countless US officials—President Biden,¹¹⁷ Secretary of Defense Lloyd Austin,¹¹⁸ Pentagon spokesperson Brig. Gen. Pat Ryder,¹¹⁹ Secretary of State Blinken,¹²⁰ as well as NATO Secretary General Stoltenberg,¹²¹ the G7 foreign ministers¹²² (who added that “Any use of chemical, biological or nuclear weapons by Russia would be met with severe consequences”), and the majority of G20 foreign ministers.¹²³ According to the White House, on November 14, 2022, President

¹¹⁴ Yasmeen Abutaleb, Karen DeYoung, and Paul Sonne, “‘Armageddon’ Warning Reflects Biden’s Instincts About Putin,” *Washington Post*, Oct. 7, 2022, <https://www.washingtonpost.com/politics/2022/10/07/biden-putin-nuclear-armageddon/>, emphasis added.

¹¹⁵ Mallory Stewart, “Keynote Address for the Commemoration of the 50th Anniversary of the Arms Control Association,” US State Department, June 2, 2022, <https://www.state.gov/keynote-address-for-the-commemoration-of-the-50th-anniversary-of-the-arms-control-association/>.

¹¹⁶ “President Biden Warns Vladimir Putin Not to Use Nuclear Weapons: ‘Don’t. Don’t. Don’t,’” CBS News, Sept. 16, 2022, <https://www.cbsnews.com/news/president-joe-biden-vladimir-putin-60-minutes-2022-09-16/>, emphasis added.

¹¹⁷ Peter Baker and Michael Levenson, “Biden Digs In on Ukraine Strategy, Seeking \$33 Billion More in Aid,” *New York Times*, Apr. 28, 2022, <https://www.nytimes.com/2022/04/28/us/politics/ukraine-biden-aid.html>; President Joe Biden, “President Biden: What America Will and Will Not Do in Ukraine,” *New York Times*, May 31, 2022, <https://www.nytimes.com/2022/05/31/opinion/biden-ukraine-strategy.html>.

¹¹⁸ “‘Why Ukraine Matters’: Remarks by Secretary of Defense Lloyd J. Austin III at the Halifax International Security Forum (As Delivered),” Department of Defense, Nov. 19, 2022, <https://www.defense.gov/News/Speeches/Speech/Article/3224089/why-ukraine-matters-remarks-by-secretary-of-defense-lloyd-j-austin-iii-at-the-h/>.

¹¹⁹ “Biden Offers Stark ‘Armageddon’ Warning on the Dangers of Putin’s Nuclear Threats,” CNN, Oct. 7, 2022, <https://www.cnn.com/2022/10/06/politics/armageddon-biden-putin-russia-nuclear-threats/index.html>.

¹²⁰ “Amid Rising Global Tensions, UN Chief Warns About Nuclear Annihilation,” Radio Free Europe/Radio Liberty, Aug. 2, 2022, <https://www.rferl.org/a/un-chief-warns-global-tensions-nuclear-annihilation/31969326.html>.

¹²¹ “NATO Head Tells Russia It Cannot Win Nuclear War,” Reuters, Mar. 23, 2022, <https://www.reuters.com/world/europe/nato-head-tells-russia-it-cannot-win-nuclear-war-2022-03-23/>.

¹²² “G7: Foreign Ministers’ Statement” European Union, Nov. 4, 2022, https://www.eeas.europa.eu/eeas/g7-foreign-ministers-statement_en.

¹²³ Shannon Bugos, “G-20 Majority Condemns Russian Nuclear Threats” Arms Control Association, Dec. 2022, G-20 Majority Condemns Russian Nuclear Threats | Arms Control Association.

Biden and Chinese President Xi Jinping discussed “Russia’s irresponsible threats of nuclear use” and “underscored their opposition to the use or threat of use of nuclear weapons in Ukraine.”¹²⁴ Whether China will fully participate in this normative coercion, or instead engage in its own escalation by providing Russia with lethal aid, remains to be seen.

Crisis stability: Conclusions

Existing analysis of Russian military strategy indicates that nuclear threats are believed to be useful at the local levels of war, and limited nuclear use or demonstrative use may be implemented in a phase of regional war—both in attempts to limit further escalation and force an off-ramp that ends in negotiations favorable to Russia.¹²⁵ The potential of Russian nuclear use, as well as Moscow’s nuclear threats, should be taken seriously by the US analytic community. However, Moscow may have a variety of hesitations before considering limited nuclear use. First, it would make Russia appear to be an irresponsible state, with no regard for the 70-plus-year taboo against nuclear use. It would also likely push away from Russia many of the states that have remained more or less neutral regarding the conflict, including India, China, and Turkey.¹²⁶ Second, nuclear use would open the door to an unpredictable and undesirable US or NATO response. Third, it would be unlikely to make Ukraine capitulate, or to blunt Western resolve to assist Kyiv; in fact, it might likely spark the opposite.¹²⁷ For these and other reasons, **the longer-term consequences of limited nuclear use might outweigh the tactical/operational benefits.** This is reinforced by the fact that presently, US officials are still saying there is no indication that Russia is preparing to use any sort of nuclear weapon.¹²⁸ Moreover, if Moscow’s intention is to coerce the West and Ukraine, there are still available steps in the escalation ladder before actual battlefield use—such as additional signaling or demonstration—that would nevertheless be reckless and spark a range of potential responses from the West. Russia will likely continue to threaten the use of nuclear weapons in this and future conflicts to deter foreign involvement and blunt the resolve of its adversaries.

Without full information about the internal deliberations of the US government and NATO, it is difficult to know how effective, if at all, Russia’s nuclear threats to deter horizontal and vertical escalation have

¹²⁴ “Biden and Xi Condemn Nuclear Threats in Hours-long Meeting,” DW, Nov. 14, 2022, <https://www.dw.com/en/biden-and-xi-condemn-nuclear-threats-in-hourslong-meeting/a-63750022> ; “Readout of President Joe Biden’s Meeting with President Xi Jinping of the People’s Republic of China,” Nov. 14, 2022, https://www.whitehouse.gov/briefing-room/statements-releases/2022/11/14/readout-of-president-joe-bidens-meeting-with-president-xi-jinping-of-the-peoples-republic-of-china/?utm_source=twitter.

¹²⁵ Michael Kofman, Anya Fink, and Jeffrey Edmonds, *Russian Strategy for Escalation Management: Evolution of Key Concepts*, CNA, Apr. 2020, <https://www.cna.org/reports/2020/04/DRM-2019-U-022455-1Rev.pdf>.

¹²⁶ Vladimir Frolov, “Strategic Procrastination: What’s Russia’s Game With Nuclear Signaling?” Carnegie Endowment for International Peace, Oct. 11, 2022, <https://carnegieendowment.org/politika/88130>.

¹²⁷ Steven Pifer, “The Kremlin Tones Down the Nuclear Rhetoric,” Center for International Security and Cooperation, Nov. 28, 2022, <https://cisac.fsi.stanford.edu/news/kremlin-tones-down-nuclear-rhetoric>.

¹²⁸ “Press Briefing by Press Secretary Karine Jean-Pierre and National Security Council Coordinator for Strategic Communications John Kirby,” Jan. 25, 2023, <https://www.whitehouse.gov/briefing-room/press-briefings/2023/01/25/press-briefing-by-press-secretary-karine-jean-pierre-and-national-security-council-coordinator-for-strategic-communications-john-kirby-5/>.

been. Deterring horizontal escalation on both sides—such as the creation of a no-fly zone or Russia’s attacking a NATO country—may be easier and more successful given the appreciation for the inherent risks of two nuclear-armed states fighting each other directly. Vertical escalation—such as through the intensification of fighting and resupply of aid—may be more challenging to deter, and the red lines may be more difficult to gauge. Two major escalation challenges arise where there is significant ambiguity between sides: What does Russia consider “the Russian homeland” or “Russian territory” (and how “red” is this red line?), and when does Western support of Ukraine’s defense become direct involvement?

Additionally, in response to aggressive Russian actions, NATO has taken several security measures to assure members and deter escalation from Moscow, including expanding the alliance to include Finland and, likely, Sweden. In response, Russian military officials have announced a series of planned military enhancements – including the addition of two new military districts, two new airborne divisions, and the reorganization of several motor rifle brigades into larger divisions.¹²⁹ These retaliatory responses indicate the potential acceleration of a NATO-Russian security dilemma¹³⁰ where actions taken by one side to enhance its security directly cause the other side to feel less secure, and, as a result, they seek to respond by enhancing their own security. This potentially **self-reinforcing security dilemma cycle, reinvigorated by Russia’s invasion of Ukraine, represents an unstable and undesirable dynamic between adversaries.**

Many factors not yet determined will also have a significant impact on US/NATO-Russian crisis stability, including Russia’s postwar international standing, the economy, the state of the Russian military and its losses, and the international sanctions regime.

Part II: Arms Race Stability

This section of the paper explores both the immediate and longer-term impacts of the Russo-Ukrainian war on arms race stability. Although arms race stability typically has had less public focus than crisis stability, developments in this area will have profound impacts for years, and possibly decades, to come.

The most acute effects of the war in Ukraine on arms race stability have been on the New START treaty -- the only remaining major arms control agreement that limits the nuclear arsenals of the US and Russia -- and the Strategic Stability Dialogue, the bilateral talks tasked with laying the groundwork for future arms control and nuclear risk reduction agreements. Signed in 2010, New START followed the previous SALT, START, and SORT efforts by introducing further limits on each side’s deployed strategic nuclear arsenal. The treaty limits each side to 1,550 warheads on 700 deployed of 800 total strategic bombers and launchers—ICBMs and submarine-launched ballistic missiles (SLBMs). The treaty was extended by Presidents Biden and Putin for a one-time, five-year period in February 2021 and will expire in February

¹²⁹ Lydia Kelly, “Russia’s military reforms respond to NATO’s expansion, Ukraine–chief of general staff” Reuters, January 23, 2023, <https://www.reuters.com/world/europe/russias-military-reforms-respond-natos-expansion-ukraine-chief-general-staff-2023-01-24/#:~:text=Under%20Moscow's%20new%20military%20plan,of%20the%20Western%20Military%20District>.

¹³⁰ John H. Herz, “Idealist Internationalism and the Security Dilemma,” *World Politics* 2, no. 2 (1950): 157–80. <https://doi.org/10.2307/2009187>. <https://www.jstor.org/stable/2009187>.

2026. If it expires without a replacement, it will be the first time in decades that the nuclear arsenals of Russia and the US will not be limited by any arms control agreement. The treaty also includes regular data exchanges regarding each side's nuclear arsenal, as well as on-site inspections at nuclear facilities conducted by representatives of the other country.

In February 2022, following Russia's invasion of Ukraine, the US decided to halt the Strategic Stability Dialogue.¹³¹ In August 2022, Russia announced that it would not resume the on-site inspections required by New START because of alleged travel restrictions associated with international sanctions following Russia's invasion.¹³² These inspections had previously been mutually suspended because of the outbreak of COVID-19.¹³³ On November 28, 2022, the Russian Foreign Ministry announced it was unilaterally postponing the Bilateral Consultative Commission (BCC)—the implementing body tasked with discussing and resolving and concerns regarding the treaty that meets biannually—scheduled to take place in Cairo between Nov. 29 and Dec. 6., 2022.¹³⁴ On January 31, 2023, the US State Department found that Russia was in violation of the New START treaty because of its failure to allow on-site inspections and to convene in the BCC.¹³⁵ Finally, on February 21, 2023, Putin announced Russia's suspension of its participation in the New START treaty. Whether Russia will re-engage with the Strategic Stability Dialogues or the New START treaty —during or after the war—remains to be seen.

Linkages between crisis stability and arms race stability

While these developments are grim, they can provide us with a number of insights. First, while the US attempted to salvage and maintain aspects of arms race stability even while crisis stability deteriorated

¹³¹ "U.S. Halts Arms-Controls Talks With Russia," *Wall Street Journal*, Feb. 25, 2022, <https://www.wsj.com/livecoverage/russia-ukraine-latest-news-2022-02-26/card/u-s-halts-arms-controls-talks-with-russia-1Kn6qixaBjKwHOFoavcV>; Ambassador Bonnie Jenkins, "Online Press Briefing with Ambassador Bonnie Denise Jenkins, Under Secretary for Arms Control and International Security," US State Department, July 12, 2022, <https://www.state.gov/online-press-briefing-with-ambassador-bonnie-denise-jenkins-under-secretary-for-arms-control-and-international-security/>.

¹³² The US State Department has confirmed that this is false: "Russian inspectors have the necessary visas, Russian treaty-designated airplanes have viable air routes to transport inspectors to the United States, inspectors can also use commercial air travel to reach U.S. territory, and there are no sanctions that prevent Russia from fully exercising its inspection rights." See US Department of State, "Russian Noncompliance with and Invalid Suspension of the New START Treaty," March 15, 2023, <https://www.state.gov/russian-noncompliance-with-and-invalid-suspension-of-the-new-start-treaty/>; "Statement by the Russian Foreign Ministry on the situation with the Treaty on Measures for the Further Reduction and Limitation of Strategic Offensive Arms (START)" [Заявление МИД России о ситуации с Договором о мерах по дальнейшему сокращению и ограничению стратегических наступательных вооружений (ДСНВ)], Ministry of Foreign Affairs of the Russian Federation, August 8, 2022, https://www.mid.ru/ru/foreign_policy/news/1825525/.

¹³³ Rose Gottemoeller, "Resuming New START Inspections Must Be a Critical Goal of Upcoming US-Russia Talks," *Bulletin of the Atomic Scientists*, Nov. 23, 2022, <https://thebulletin.org/2022/11/resuming-new-start-inspections-must-be-a-critical-goal-of-upcoming-us-russia-talks/>.

¹³⁴ This meeting was cancelled in the final hour at a high level, after both sides had been preparing to attend.

¹³⁵ "U.S. says Russia violating New START nuclear arms control treaty," *Reuters*, Jan. 31, 2023, <https://www.reuters.com/world/russia-not-complying-with-inspection-obligation-under-nuclear-arms-treaty-us-2023-01-31/>.

following the Ukraine invasion, Moscow repeatedly insisted that these issues could not be viewed separately from each other. For example, on November 29, 2022, when the Russian Foreign Ministry announced it would not meet for New START discussions, Foreign Ministry spokesperson Maria Zakharova blamed the US for launching a “hybrid war” against Russia, “helping the Kyiv regime to kill our military and civilians in the Russian regions, providing for this increasingly destructive means of armed struggle and sending American instructors, advisers and mercenaries to Ukraine.” She stated that the arms control talks could not be divorced from “geopolitical realities.”¹³⁶ On January 26, 2023, Russian Deputy Foreign Minister Ryabkov said:

For our part, we state that the overwhelming aggressiveness of the United States, which relied on inflicting a “strategic defeat” on Russia in *the all-out hybrid war unleashed against us, made it practically impossible in principle to conduct constructive and fruitful dealings with Washington on arms control in the “as usual” mode.* This, of course, does not mean that we are giving up arms control as such. *But this sphere cannot exist in isolation from the military-political and geostrategic realities....* Due to the totality of circumstances, the Russian side believes that until the United States reconsiders its extremely hostile line towards our country and does not abandon the policy of increasing threats to Russia’s national security, any positive signals about the issues raised by Washington in the context of the START implementation would be unjustified, untimely, and inappropriate....As for the criteria for the extent to which the US would need to adjust its policy towards Russia in order to move towards a constructive arms control agenda, *that will be determined on the basis of a comprehensive analysis of the situation and actions of Washington. First of all, of course, in the context of the crisis around Ukraine.* I am convinced that the United States is well aware of what kind of de-escalation steps we expect from them.¹³⁷

On February 21, 2023, Putin said in his address to the Federal Assembly that

NATO representatives are giving signals, and in fact putting forward an ultimatum: *you, Russia, carry out everything that you agreed on, including the START Treaty, unquestioningly, and we will behave as we please. Like, there is no connection between the issues of START and, say, the conflict in Ukraine,* other hostile actions of the West against our country, just as there are no loud statements that they want to inflict a

¹³⁶ Robyn Dixon, “Russia Postpones Talks on New START Pact, Imperiling Major Nuclear Accord,” *Washington Post*, Nov. 30, 2022, <https://www.washingtonpost.com/world/2022/11/30/russia-us-start-nuclear-treaty/>; “Russia postpones nuclear arms control talks with US, State Department says,” CNN, Nov. 28, 2022, <https://www.cnn.com/2022/11/28/politics/us-russia-arms-control-talks/index.html>.

¹³⁷ “The United States is Well Aware of What Steps We Expect from Them to De-escalate” [«В США прекрасно понимают, каких шагов по деэскалации мы от них ждем»], *Kommersant*, Jan. 26, 2023, <https://www.kommersant.ru/doc/5785723>, emphasis added.

strategic defeat on us. This is either the height of hypocrisy and cynicism, or the height of stupidity.¹³⁸

On March 1, 2023, Russian Deputy Foreign Minister Ryabkov stated, "Until the United States changes its behavior, *until we see signs of common sense in what they are doing in relation to Ukraine, in Ukraine, we see no chance for the decision to suspend START to be reviewed or re-examined.*"¹³⁹ In April 2023, the Russian Foreign Ministry stated that New START could only be resumed following a "*radical revision of the highly hostile course aimed at deliberately undermining our national security*" and also added that it would be necessary to look for methods for taking into account the "combined nuclear arsenal" of the US, UK, and France "which are allies in the NATO bloc." Including France and UK in New START-type reductions is often viewed as a non-starter. For example, France's position is that it will not participate in such negotiations until the US and Russia have significantly reduced their own arsenals to bridge the gap between its much smaller arsenal.¹⁴⁰

This paper does not claim that there is necessarily always a relationship or reinforcing effect between crisis stability and arms race stability. Whether or not certain types of arms control agreements are possible and have the potential to be particularly fruitful in times of intense conflict and competition is outside the scope of this paper. However, this case study does highlight some of the **challenges associated between the two aspects of strategic stability in times of conflict**. Even legally binding arms control agreements require both parties to have a continued desire to comply, which can be challenging in a security environment where tensions have significantly grown. Even if such agreements arguably provide real mutual national security benefits to both sides, they are still subject to being held captive in the greater context of a deteriorating bilateral relationship. More research should be conducted about the threshold conditions for arms control between adversaries, and on strategies for delinking arms control from worsening crisis stability conditions.

Whataboutism, continued

Russia's strategy of deflecting blame from itself and onto the US, which was identified as a strategy in the crisis stability section of this report, is also observed in relation to arms race stability. First, Russian officials argued that the US was the first to link arms control to crisis stability by pausing ongoing strategic stability talks based on the war in Ukraine. For example, Igor Vishnevetsky, deputy director of the Russian Foreign Ministry's non-proliferation and arms control department, made a speech at the 2022 Nonproliferation Treaty Review Conference stating that the "positive developments" from the creation of the Strategic Stability Dialogue "were devalued by the US policy of ignoring Russia's 'red lines'

¹³⁸ "President's Address to the Federal Assembly," Feb. 21, 2023, <http://kremlin.ru/events/president/news/70565>, emphasis added.

¹³⁹ "The Russian Foreign Ministry Announced the Discussion of Russia and the United States on closed channels on the topic of START" [В МИД РФ заявили об обсуждении Россией и США по закрытым каналам тематики СНВ], Interfax, Mar. 1, 2023, <https://www.interfax.ru/russia/889279>, emphasis added.

¹⁴⁰ Elena Chernenko, "'We are witnessing a significant disproportion between the potential of the two largest nuclear powers and the potential of France'" [«Мы наблюдаем значимую диспропорцию между потенциалом двух крупнейших ядерных держав и потенциалом Франции»], Kommersant, April 19, 2023, <https://www.kommersant.ru/doc/5940821>

in the field of security. Washington used our rebuff to this destructive course as a pretext for ‘freezing’ the strategic dialogue.”¹⁴¹ On January 26, 2023, Russian Deputy Foreign Minister Ryabkov also accused the US of being responsible for the failure to convene the Bilateral Consultative Commission (BCC), the implementing body of the New START Treaty, adding that “*It was the Americans who initially began to make political linkages....This is an example of Washington’s irresponsible politicization of arms control.*” While one could argue that the US first linked arms control issues to the war in Ukraine by postponing the Strategic Stability Dialogue, this talking point evades responsibility for the underlying reason that prompted that decision: Russia’s invasion of Ukraine. Moreover, the US government has consistently reiterated its willingness to engage in bilateral arms control discussions with Russia “without preconditions” while Moscow has refused to come back to the table.¹⁴²

Additionally, there is technically no suspension mechanism in the New START treaty – but withdrawal is permitted through the Vienna Convention if a counterpart “materially violates” a treaty. Therefore, Russia has voiced its concerns over the US conversion of SLBM launchers and heavy bombers.¹⁴³ To meet New START counting limits, the US converted several bombers to conventional-only missions and deactivated several missile tubes on Ohio-class ballistic missile submarines. The Russian Foreign Ministry stated that the conversion of “more than 100 units” were carried out in such a way “that the Russian side cannot confirm that these strategic offensive weapons have been brought into a state unsuitable for their use” and accused the US of “material violation” of the treaty.¹⁴⁴ Yet, as US Undersecretary for Arms Control Mallory Stewart noted in February 2023: “Again, the U.S. has remained ready to host Russian inspectors at U.S. facilities specifically so that Russia can verify conversions and we have been ready to engage in the BCC to discuss any implementations concerns Russia has under the treaty.”¹⁴⁵ Such comments from US officials redirect the blame to Moscow and expose Russia’s unwillingness to address these accusations in good faith. Rather, the claim appears to be Moscow’s scapegoat to attempt to “legally” suspend its participation in the treaty,¹⁴⁶ though the choice was political.

¹⁴¹ “Address by Deputy Head of the Delegation of the Russian Federation to the 10th Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons I.S. Vishnevetsky (general debate), New York, 2 August 2022 ” [Выступление заместителя руководителя делегации Российской Федерации на 10-й Конференции по рассмотрению действия Договора о нераспространении ядерного оружия И.С.Вишневецкого (общие прения), Нью-Йорк, 2 августа 2022 года], August 2, 2022, https://www.mid.ru/ru/foreign_policy/news/1824889/

¹⁴² “Remarks by National Security Advisor Jake Sullivan for the Arms Control Association (ACA) Annual Forum”, Arms Control Association, June 2, 2023, <https://www.armscontrol.org/2023AnnualMeeting/sullivan-remarks>

¹⁴³ Assistant Secretary Mallory Stewart, “Assistant Secretary Mallory Stewart’s Remarks at the Brookings Institution,” Feb. 27, 2023, <https://www.state.gov/mallory-stewart-remarks-at-brookings-institution/>.

¹⁴⁴ Luisa Balasyan, “Bilateral agreement” [Двусторонний уговор], Kommersant, March 16, 2023, https://www.kommersant.ru/doc/5876251?from=glavnoe_2 ; “The United States has exceeded the arms limit laid down in START-3” [США превысили заложенный в СНВ-3 лимит вооружения], *Izvestiya*, May 24, 2021

¹⁴⁵ Assistant Secretary Mallory Stewart, “Assistant Secretary Mallory Stewart’s Remarks at the Brookings Institution,” Feb. 27, 2023, <https://www.state.gov/mallory-stewart-remarks-at-brookings-institution/>.

¹⁴⁶ Twitter post from Elena Chernenko, March 16, 2023, <https://twitter.com/ElenaChernenko/status/1636490936355020801?s=20>

US and NATO responses

Response strategies from US and NATO officials have been to highlight the irresponsible nature of Russia's behavior and to de-link arms control from the war in Ukraine. NATO Secretary General Stoltenberg¹⁴⁷ and US Undersecretary for Arms Control Stewart¹⁴⁸ have both condemned Moscow's decision as reckless and irresponsible and urged Putin to reconsider. Secretary of State Anthony Blinken stated that, "We remain ready to talk about strategic arms limitations at any time with Russia irrespective of anything else going on in the world or in our relationship. I think it matters that we continue to act responsibly in this area."¹⁴⁹ He added, "We'll be watching carefully to see what Russia actually does."¹⁵⁰ At the time of this writing, President Biden has not publicly commented on the decision, except to call it a "big mistake."¹⁵¹

In a February 27, 2023, speech, Stewart also argued that if Putin was trying to link crisis stability and arms race stability—perhaps in an effort to coerce the US or NATO countries against continuing their support for Ukraine—withdrawing from the treaty would have the opposite of the intended effect. "*Russia's announced suspension of New START will not deter the United States or its allies and partners from supporting Ukraine. In fact, Moscow's decision and its continuing nuclear threats only reinforce how important standing behind Ukraine remains for the United States and the global community....* Putin's desire to promote instability and manipulate nuclear risks is more likely to drive countries to band closer together for their common defense; and it certainly will not compel the United States to back down in its support for Ukraine."¹⁵² This statement demonstrates **an effort to re-sever any linkage between arms control and crisis stability** and instead establishes a relationship between irresponsible Russian nuclear behavior and continued Western support.

The US offered to continue participating in the notifications and biannual data exchange required by New START—where information on each side's nuclear arsenal is shared to enhance transparency and stability between the US and Russia—following Moscow's suspended participation in the treaty, but in late March 2023, Moscow announced it would cease sharing any of this information.¹⁵³ On March 27, the United States made a reciprocal announcement that it would therefore stop sharing its information as

¹⁴⁷ "Joint press point," North Atlantic Treaty Organization, Feb.21, 2023, https://www.nato.int/cps/en/natohq/opinions_211480.htm.

¹⁴⁸ Assistant Secretary Mallory Stewart, "Assistant Secretary Mallory Stewart's Remarks at the Brookings Institution," Feb. 27, 2023, <https://www.state.gov/mallory-stewart-remarks-at-brookings-institution/>.

¹⁴⁹ "Secretary Antony J. Blinken Remarks to the Press", US State Department, Feb. 21, 2023, <https://www.state.gov/secretary-antony-j-blinken-remarks-to-the-press-7/>.

¹⁵⁰ "Secretary Antony J. Blinken Remarks to the Press", US State Department, Feb. 21, 2023, <https://www.state.gov/secretary-antony-j-blinken-remarks-to-the-press-7/>.

¹⁵¹ Caroline Kenny and Summer Concepcion, "Biden Says Putin Made a 'Big Mistake' on New START Treaty," NBC News, Feb. 22, 2023, <https://www.nbcnews.com/politics/joe-biden/biden-says-putin-made-big-mistake-new-start-treaty-rcna71764>.

¹⁵² Assistant Secretary Mallory Stewart, "Assistant Secretary Mallory Stewart's Remarks at the Brookings Institution," Feb. 27, 2023, <https://www.state.gov/mallory-stewart-remarks-at-brookings-institution/>, emphasis added.

¹⁵³ Elena Chernenko, "That's all that's left after it" [Это все, что останется после него], *Kommersant*, April 8, 2023, <https://www.kommersant.ru/doc/5925040>

well. On June 1, 2023, the US State Department published a list of additional countermeasures it will take in response to Russia's violations.¹⁵⁴ US National Security Advisor Jake Sullivan noted that these measures "will help guarantee that Russia does not receive benefits from a treaty they refuse to abide by, and that the principle of reciprocity—a key tenet of strategic arms control—is upheld."¹⁵⁵ Only a few nuclear risk reduction agreements between the US and Russia, such as the advance notification of ballistic missile launches and major strategic exercises remain.¹⁵⁶

Key impacts on arms race stability

In addition to Moscow's suspension of the Strategic Stability Dialogue as well as its participation in New START, Russia's invasion of Ukraine presents a myriad of immediate and more lasting impacts on arms race stability.

First, Russia's suspension of its participation in New START **reduces transparency, predictability, and stability between the world's two largest nuclear powers**. In addition, it will likely be **more challenging or resource-consuming for both countries to acquire the data** they were once voluntarily receiving about each other's nuclear arsenal and will likely need to substitute this lost intelligence with their own national technical means (i.e., satellites). It is also possible that the intelligence gathered by these means will not be as reliable as the data provided under the treaty, which was verifiable through treaty mechanisms.

Second, there may be **some potential for renewed arms racing**. Most obviously, Russia's suspension of its New START obligations could enable Russia to begin deploying more than 1,550 warheads on more than 700 deployed strategic systems. Some argue that such a Russian nuclear buildup appears to be unlikely in the near future,¹⁵⁷ and Russian officials have stated that they will still conform to the New START deployment limits, suggesting that the US should do the same.¹⁵⁸ On June 2, 2023, US National Security Advisor Jake Sullivan stated that, "It is in neither of our countries' interests to embark on an open-ended competition in strategic nuclear forces—and we're prepared to stick to the central limits as long as Russia does."¹⁵⁹ Such a model of mutual restraint could continue on indefinitely, substituting for formalized arms control agreements, should Russia choose not to restore its participation under the treaty.¹⁶⁰ However, some officials, such as Andrei Kartapolov, chairman of the State Duma Committee on

¹⁵⁴ "U.S. Countermeasures in Response to Russia's Violations of the New START Treaty" June 1, 2023, US Department of State, <https://www.state.gov/u-s-countermeasures-in-response-to-russias-violations-of-the-new-start-treaty/>

¹⁵⁵ "Remarks by National Security Advisor Jake Sullivan for the Arms Control Association (ACA) Annual Forum", Arms Control Association, June 2, 2023, <https://www.armscontrol.org/2023AnnualMeeting/sullivan-remarks>

¹⁵⁶ Chernenko, "That's all that's left after it."

¹⁵⁷ Twitter post by Pavel Podvig, Feb. 21, 2023, <https://twitter.com/russianforces/status/1627985043154169860>.

¹⁵⁸ "Russia Says It Will Play by Nuclear Treaty Rules Despite Suspending Deal with U.S.," Reuters, Feb. 22, 2023, <https://www.reuters.com/world/russia-dumas-speaker-says-us-destroyed-international-stability-2023-02-22/>.

¹⁵⁹ "Remarks by National Security Advisor Jake Sullivan for the Arms Control Association (ACA) Annual Forum", Arms Control Association, June 2, 2023, <https://www.armscontrol.org/2023AnnualMeeting/sullivan-remarks>

¹⁶⁰ For additional CNA research on the New START treaty, see Vince Manzo, *Nuclear Arms Control Without a Treaty? Risks and Options after New START*, CNA, March 2019, <irm-2019-u-019494.pdf> (cna.org).

Defense, are already advocating for increases. “We are suspending our participation in this treaty in response to the actions of our partners and are free to do whatever we want in order to ensure the security of our homeland. *It will be necessary to increase the number of warheads—it will be necessary to increase the number of carriers—we will increase them, this is our right.*”¹⁶¹ If Russia does eventually increase the number of nuclear weapons it deploys, there would be significant potential ramifications for the US and its allies. For example, should the US decide it needs to increase the quantity of its own deployed weapons to meet its deterrence—and extended deterrence—commitments, it could presumably entail serious modifications to the ongoing modernization of the nuclear triad, incur significant expenses, and result in wide-ranging operational changes. Making such decisions will inevitably present complex deliberations for US leadership and the US allies to whom the US extends nuclear deterrence, as well as considerations regarding US disarmament commitments under Article 6 of the Treaty on the Nonproliferation of Nuclear Weapons (NPT). And, if not in the immediate term, it is possible that **Russia may have an increased reliance on its nuclear arsenal** because of Russia’s depleted conventional capabilities from its war in Ukraine. This has the potential to affect nuclear declaratory policy, strategy, deterrence behavior, funding priorities, and arms racing.

Second, there may be impacts on **international norms and proliferation**. Some analysts argue that the invasion by a nuclear-armed country against a non-nuclear neighbor could drive other states to proliferate, particularly if there are unfavorable outcomes for Ukraine.¹⁶² Others argue this will not be the case.¹⁶³

Third, there are **new challenges to the future of US-Russian arms control**. As a result of the war, some analysts have argued that the ongoing pursuit of US-Russia bilateral nuclear arms control may become more difficult, assuming that Russia will have a heavier reliance on nuclear weapons following severe conventional losses.¹⁶⁴ And, given Moscow’s invasion and attempted annexation of territories belonging to its sovereign neighbor, there will likely be a **reinforced notion that Russia is not a trustworthy actor and does not regard international norms or institutions**. This may make it harder for the US Congress to ratify arms control agreements to which Russia is a party, though this has steadily become more challenging for other reasons, including the political polarization of arms control. If Russia’s noncompliance with New START is consequential or prolonged, it could have a negative impact on ratifying future arms control agreements. As Senators Bob Menendez, Jack Reed, and Mark Warner said in a statement, “To be very clear, compliance with New START treaty obligations will be critical to Senate

¹⁶¹ “Russia Suspends Participation in the Treaty on Nuclear Missiles. What Does That Mean” [Россия приостанавливает участие в договоре о ядерных ракетах. Что это значит], *Gazeta.Ru*, Feb. 21, 2023, <https://www.gazeta.ru/politics/2023/02/21/16289299.shtml?updated>.

¹⁶² Stephen J. Cimbala and Lawrence J. Korb, “Reviving Arms Control, Post-Ukraine: Why New START Still Matters,” *Russia Matters*, July 13, 2022, <https://www.russiamatters.org/analysis/reviving-arms-control-post-ukraine-why-new-start-still-matters>,

¹⁶³ Eric Brewer, Nicholas L. Miller, and Tristan Volpe, “Ukraine Won’t Ignite a Nuclear Scramble,” *Foreign Affairs*, Nov. 17, 2022, <https://www.foreignaffairs.com/ukraine/ukraine-wont-ignite-nuclear-scramble>.

¹⁶⁴ Tobin Harshaw, “Ukraine War’s Big Question: Who Will Run Out of Missiles First?,” *Bloomberg*, Dec. 10, 2022, <https://www.bloomberg.com/opinion/articles/2022-12-10/ukraine-russia-war-which-side-will-run-out-of-missiles-first>.

consideration of any future strategic arms control treaty with Moscow.”¹⁶⁵ In May 2023, Moscow also announced its withdrawal from the Conventional Forces in Europe (CFE) treaty and recently failed to meet its data-sharing obligations under the Vienna Document, both of which may reinforce growing US perceptions that Russia is not interested in meaningfully participating in arms control.¹⁶⁶ Each of these decisions may indicate **a growing Russian preference against sharing military data or cooperating in arms control agreements with Western parties, at least in the immediate term.**¹⁶⁷ The extent to which these trends can be reversed during or after the Russo-Ukrainian war remains to be seen.

Several existing obstacles that pre-date Russia’s invasion of Ukraine also pose complications to US-Russian bilateral arms control. One example is the steadily increasing potential for tripolar great power nuclear arms racing. Whereas the majority of nuclear history has been dominated by two primary actors—the USSR/Russia and the US—China’s apparent interest in qualitatively and quantitatively improving its nuclear arsenal increases its relative role and significantly influences arms racing dynamics. One analyst argues that a tripolar “Red Queen’s” arms race could occur, where parity is continuously sought by all sides but never achieved.¹⁶⁸ In such a scenario, if China were to deploy the same sized strategic nuclear force as Russia and the US (i.e., ~1,550 warheads, per New START limits) US strategists might conclude that they need to add at least an additional 1,550 warheads to achieve parity with the combined forces of China and Russia (i.e., 3,100 warheads). In such a scenario, Russia might follow suit to match quantitative parity with the US, sparking China to follow suit. At this point, by the stated logic, the US would need 6,200 weapons. This unstable tripolar cycle could presumably continue indefinitely. For these types of reasons, some influential nuclear strategists have long been calling for the US to withdraw from New START and deploy higher numbers of nuclear weapons.¹⁶⁹

And, before identifying any nuclear arms control agreement to follow New START, US and Russian delegations would have to come to agreement on a variety of contentious issues. The Russian side has historically been concerned with US missile defenses and conventional long-range precision-strike systems, and the US side has long expressed interest in limiting nonstrategic nuclear weapons, as well

¹⁶⁵ “U.S. Says Russia Violating New START Nuclear Arms Control Treaty,” Reuters, Jan. 31, 2023, <https://www.reuters.com/world/russia-not-complying-with-inspection-obligation-under-nuclear-arms-treaty-us-2023-01-31/>.

¹⁶⁶ Gabriela Iveliz Rosa-Hernández, “How Russia’s retreat from the Vienna Document information exchange undermines European security,” Bulletin of the Atomic Scientists, March 24, 2023, <https://thebulletin.org/2023/03/how-russias-retreat-from-the-vienna-document-information-exchange-undermines-european-security/>.

¹⁶⁷ Gabriela Iveliz Rosa-Hernández, “How Russia’s retreat from the Vienna Document information exchange undermines European security,” Bulletin of the Atomic Scientists, March 24, 2023, <https://thebulletin.org/2023/03/how-russias-retreat-from-the-vienna-document-information-exchange-undermines-european-security/>.

¹⁶⁸ Andrew Krepinevich, Jr., “The New Nuclear Age: How China’s Growing Nuclear Arsenal Threatens Deterrence,” *Foreign Affairs*, May/June 2022, <https://www.foreignaffairs.com/articles/china/2022-04-19/new-nuclear-age>.

¹⁶⁹ Frank Miller, “Outdated Nuclear Treaties Heighten The Risk Of Nuclear War,” *Wall Street Journal*, Apr. 22, 2022, https://www.wsj.com/articles/outdated-nuclear-treaties-new-start-treaty-russia-putin-china-xi-heighten-risk-nuclear-war-missile-test-ukraine-deterrence-11650575490?mod=opinion_lead_pos6.

as potentially attempting to draw China into an agreement.¹⁷⁰ (Russia has responded by stating that, if the treaty is to be expanded to include other parties, it should include constraints on the nuclear arsenals of the UK and France.) The hopes of resolving these issues in the formats of the BCC and the Strategic Stability Dialogue, at least for the near term, now appear to be diminished.

The exact future of the New START treaty, the Strategic Stability Dialogue (SSD), and US-Russian bilateral arms control in general remains unclear. Russia's suspension of its participation is not legally a withdrawal, and Russian officials have stressed that the decision could be reversible (though, Moscow's linkage to US/NATO support of Ukraine make resumption seem untenable). In March 2023, Russia's permanent representative to international organizations in Vienna, Mikhail Ulyanov, stated that the US is "openly declaring the goal of inflicting a 'strategic defeat' on Russia." To this end, he stated, Washington is taking "numerous hostile steps....What kind of dialogue can we talk about now?"¹⁷¹ Russian Deputy Foreign Minister Ryabkov noted in a January 26, 2023, interview: "A pessimist would say, 'It's just a matter of time before we face a world without Russian-American arms control.' An optimist would say: 'Let's not bet on the bad and give a chance to hope for the best.' Well, a realist would confine himself to the phrase 'Wait and see.'"¹⁷² On April 5, 2023, Ryabkov stated "The treaty is not dead, but it is in intensive care." As recently as June 2, 2023, the US continues its efforts to de-link arms control from the war in Ukraine, stating, "Rather than waiting to resolve all of our bilateral differences—the United States is ready to engage Russia now to manage nuclear risks and develop a post-2026 arms control framework. We are prepared to enter into those discussions."¹⁷³

Arms race stability conclusions

A number of wide-ranging near-term and long-term impacts on arms race stability flow from Russia's invasion of Ukraine. Near-term impacts include the stagnation of the Strategic Stability Dialogue and Russia's suspension of and noncompliance with New START. The fate of each of these efforts remain to be seen. In any case, Russia's invasion of Ukraine and its subsequent political linkages have gravely reduced transparency, predictability, and stability between the world's two largest nuclear-armed powers.

In the long term, there may be operational and security challenges associated with an era of increased nuclear competition as well as additional obstacles for the future of US-Russian nuclear arms control, which were already complicated by factors such as domestic polarization of arms control and China's nuclear rise. The potential for nuclear arms racing has increased, and will be affected by tripolar

¹⁷⁰ Rose Gottemoeller, *Negotiating the New START Treaty*, Cambria Press, Amherst, New York, 2021

¹⁷¹ "Ulyanov: the dialogue between the Russian Federation and the United States on strategic stability will not resume soon" [Ульянов: диалог РФ и США по стратегической стабильности возобновится не скоро], МК, March 2, 2023, <https://www.mk.ru/politics/2023/03/02/ulyanov-dialog-rf-i-ssha-po-strategicheskoy-stabilnosti-vozobnovitsya-ne-skoro.html>.

¹⁷² "The United States Is Well Aware of What Steps We Expect from Them to De-Escalate," [«В США прекрасно понимают, каких шагов по деэскалации мы от них ждем»], *Kommersant*, Jan. 26, 2023, <https://www.kommersant.ru/doc/5785723>.

¹⁷³ "Remarks by National Security Advisor Jake Sullivan for the Arms Control Association (ACA) Annual Forum", Arms Control Association, June 2, 2023, <https://www.armscontrol.org/2023AnnualMeeting/sullivan-remarks>

dynamics, alliance considerations, defense spending priorities, NPT Article 6 obligations, and the success or failure of future arms control efforts. It is possible that subsequent US-Russian arms control efforts will look different; some argue they make take on a less-formalized character and may focus more on nuclear risk reduction than on strict counting limits.

In the context of arms race stability, as in crisis stability, Russian officials have attempted to deflect blame onto the US whenever possible. And, while the US has attempted to separate the deterioration of crisis stability from having a spillover impact on arms race stability, Russia has consistently insisted throughout the conflict that it could not divorce the matters of bilateral arms control from “geopolitical realities.” Though this case study alone is not sufficient in demonstrating any broader relationship between crisis stability and arms race stability, it does highlight the fragility of even a legally binding arms control treaty in the context of worsening peer-competitor relations—and the fact that both parties must be willing to continue implementing the agreement for its sustained success.

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IOP-2023-U-035792-Final

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