

SECURITY STUDIES CENTER

PROLIFERATION PAPERS

No. 65



The Wind Rose's Directions: Russia's Strategic Deterrence during the First Year of the War in Ukraine

Anya FINK

The French Institute of International Relations (Ifri) is a research center and

a forum for debate on major international political and economic issues.

Headed by Thierry de Montbrial since its founding in 1979, Ifri is a non-

governmental, non-profit foundation according to the decree of

November 16, 2022. As an independent think tank, Ifri sets its own research

agenda, publishing its findings regularly for a global audience.

Taking an interdisciplinary approach, Ifri brings together political and

economic decision-makers, researchers and internationally renowned

experts to animate its debate and research activities.

The opinions expressed in this text are the responsibility of the author alone.

ISBN: 979-10-373-0744-6

© All rights reserved, Ifri, 2023

Cover: Russian strategic exercise Grom, February 2022 © Russian Ministry of Defense

How to quote this publication:

Anya Fink, "The Wind Rose's Directions: Russia's Strategic Deterrence during the

First Year of the War in Ukraine", Proliferation Papers, No. 65, Ifri, August 2023.

Ifri

27 rue de la Procession 75740 Paris Cedex 15 – FRANCE

Tel.: +33 (0)1 40 61 60 00 - Fax: +33 (0)1 40 61 60 60

Email: accueil@ifri.org

Website: Ifri.org

Proliferation Papers

As international security is increasingly shaped by global strategic competition among great and middle powers, nuclear armaments and more generally weapons of mass destruction (WMDs) have been brought back to the fore, gradually recovering the centrality they had during the Cold War era. Whether it be Russia's nuclear rhetoric over Ukraine, the progress of North Korea's proliferating activities, China's strategic and nuclear build-up, and worrying trends in Middle East's arms race, deterrence and proliferation issues are now again an essential aspect of international politics.

For more than 20 years, the "**Proliferation Papers**" series has been published by Ifri's Security Studies Center with the aim to deepen the understanding of the WMDs and related conventional topics, by crossing analyses through various angles: technical, regional, diplomatic, and strategic. Bringing together recognized and emerging authors, the series aims to shed a new light on issues pertaining to WMD proliferation, evolving nuclear doctrines, concepts, and posture as well as new technologies and military capabilities.

Editorial Board

Chief editor: Élie Tenenbaum

Deputy chief editor: Héloïse Fayet Editorial assistant: Lucas Da Silva

Author

Anya Fink is a research scientist in the Russia Studies Program at CNA and a research associate at the Center for International and Security Studies at Maryland (CISSM). All opinions expressed and errors contained in this piece are her own.

Prior to joining CNA, Dr. Fink was a Nuclear Security Working Group fellow in the US Senate and a Stanton Nuclear Security fellow at the RAND Corporation. She was also a program officer in nuclear security at the Stanley Foundation and a research associate at the James Martin Center for Nonproliferation Studies. She holds an MPIA from the University of Pittsburgh and a PhD in international security and economic policy from the University of Maryland, College Park.

Executive Summary

Since the beginning of the Russian war of aggression on Ukraine, and even before February 2022, the Russian government has conducted intense nuclear rhetoric and actions. This behavior is a specific approach to strategic deterrence that seeks to incorporate nonmilitary and military (nuclear and nonnuclear) means into a continuous spectrum of actions for deterrence, escalation management, and warfighting. Nuclear weapons are the foundation of credible strategic deterrence and signaling with these and other strategic capabilities could in theory be instrumental for deterring the escalation of a local conflict to a regional war.

Russian signaling varies from aggressive declarations from Putin himself but also Russian officials such as Medvedev or journalistic cronies, to medium to large scale strategic exercises like the infamous Grom. Likewise, on the international stage, Russia has shown restraint by reimplementing the Reagan-Gorbachev declaration, but also deliberate disrespect of arms control agreements, notably by suspending its participation to the New START treaty.

In practice, however, Russia's use of strategic deterrence signaling in this conflict has been met with mixed results insofar as it has not compelled the cessation of or constraints on Western lethal aid to Ukraine, even though it may have, at least in the eyes of Russian officials, deterred direct Western intervention.

Consequently, there might be more to expect from Russia, depending on the evolution of the daily battlefield in Ukraine. If the use of a nuclear weapon is still very unlikely, some other strategic moves in the hybrid domain (cyberattacks, attacks on undersea cables, information manipulation) could also serve as signaling.

Résumé

Depuis le début de l'invasion de l'Ukraine par la Russie, et même avant février 2022, le gouvernement russe a intensifié son recours à la rhétorique nucléaire, accompagnée de manœuvres dans ce domaine. Ce comportement s'inscrit dans une approche russe spécifique de la dissuasion stratégique, qui cherche à intégrer des moyens non militaires et militaires (nucléaires et non nucléaires) dans un spectre continu d'actions de dissuasion, de gestion de l'escalade et de prévention de la lutte armée à grande échelle. Les armes nucléaires se trouvent au cœur de la doctrine russe et sont considérées comme le fondement d'une dissuasion crédible. Dans cette optique, leur mise en avant, accompagnée de moyens non stratégiques, est censée, en principe du moins, freiner l'escalade d'un conflit local vers un théâtre régional de guerre.

Le spectre des actions russes englobe un large éventail de mesures, allant des déclarations véhémentes du président Poutine lui-même, en passant par des représentants de haut rang comme Medvedev, jusqu'aux journalistes étroitement affiliés au pouvoir. De plus, les exercices stratégiques d'envergure tels que l'opération « Grom » sont également compris dans cette démarche. Au niveau international, la Russie a affiché une attitude ambivalente, exprimant à nouveau son soutien envers la déclaration Reagan-Gorbatchev, tout en fragilisant le cadre de non-prolifération et de maîtrise des armements en suspendant sa participation au traité New Start.

Néanmoins, dans les faits, l'approche russe en matière de dissuasion dans le contexte du conflit ukrainien a donné des résultats mitigés et a échoué à contraindre les puissances occidentales à cesser ou limiter leur soutien à l'Ukraine, même si, du point de vue des responsables russes, elle a pu dissuader une intervention directe de la part de ces puissances.

Dans cette optique, il est prévisible que la Russie adopte des mesures supplémentaires en fonction de l'évolution du théâtre des opérations en Ukraine. Bien que l'emploi d'armes nucléaires demeure hautement improbable, d'autres actions stratégiques dans le domaine hybride, telles que les cyberattaques, les atteintes aux câbles sous-marins et la manipulation de l'information, pourraient également être interprétées comme relevant du signalement stratégique.

Table of Contents

INTRODUCTION	7
NUCLEAR KREMLINOLOGY	9
Nuclear weapons in US-Russian crises	9
Russian signaling and strategic deterrence	11
RUSSIAN SIGNALING IN THE WAR IN UKRAINE	17
Declaratory policy	17
Rhetoric by political leadership	17
Rhetoric by civilian surrogates	19
Rhetoric by military leadership	19
Military means	21
Capability demonstrations	21
Increased readiness	22
Coercive encounters	23
Military exercises	24
Grom strategic command-post exercises	25
International dimension	26
Treaty regimes	26
Statements about not wanting a nuclear war	27
Nuclear sharing	27
Military cooperation	28
STRATEGIC GESTURES:	
POTENTIAL ESCALATION AND EFFECTS TO DATE	29
Steps not taken: transition from local war to regional war	·29
Effectiveness of strategic gestures	30
CONCLUSION	32

Introduction

On February 27, 2022, Russia's President Vladimir Putin ordered the Russian military to place Russian strategic (nuclear and nonnuclear) deterrent forces in a "special service regime." This action was Putin's response to what he described as "aggressive statements" from "leading North Atlantic Treaty Organization (NATO) country officials" toward Russia, whose forces invaded its neighbor Ukraine several days prior. What did Putin's order mean for the Russian strategic deterrent forces? Such a "regime" was unknown to analysts tracking Russian nuclear forces. The Kremlin website translated his statement as an order to put the forces "on high combat alert." Western press widely reported that Russia increased its nuclear alert levels. However, US officials countered that there were no concerning nuclear "muscle movements" on Russia's part. Subsequent Russian reporting stated that Putin's order led to an increase in manning across the strategic deterrent forces.

Since the beginning of the war in Ukraine, Putin and his surrogates in the Russian government have engaged in threatening rhetoric and actions. Much of this signaling has invoked Russia's possession of nuclear weapons. Putin's "special service regime" order came several days after a speech in which he invoked Russia's status as "one of the most powerful nuclear states" and stated that "there should be no doubt for anyone that any potential aggressor will face defeat and ominous consequences should it directly attack our country." And, several days before that speech, Russian forces carried out a significant strategic deterrence forces exercise. This exercise was

^{1. &}quot;Putin Orders 'special service regime' in Russia's Deterrence Force," TASS, February 27, 2022, available at: tass.com.

^{2.} Ibid.

^{3. &}quot;Meeting with Sergei Shoigu and Valery Gerasimov," Kremlin.ru, February 27, 2022, available at: en.kremlin.ru.

^{4.} Y. Karmanau, J. Heintz, V. Isachenkov and D. Litvinova, "Putin Puts Nuclear Forces on High Alert, Escalating Tensions," AP News, February 28, 2022, available at: apnews.com; P. Stewart and I. Ali, "No Russian 'Muscle Movements' after Putin's Nuclear Readiness Alert, U.S. Says", Reuters, February 28, 2022, available at: www.reuters.com. 5. Ibid.

^{6. &}quot;Силы сдерживания ВС России приступили к несению боевого дежурства усиленным составом [Deterrence Forces of the Russian Armed Forces began to Carry Out Combat Duty with a Reinforced Composition]," TASS, February 28, 2022, available at: tess.ru.

^{7. &}quot;Address by the President of the Russian Federation," Kremlin.ru, February 24, 2022, available at: en.kremlin.ru.

seemingly conducted out of its usual cycle and followed extensive Russian political-military signaling and troop movements.⁸

Western analysts have closely tracked Russian nuclear rhetoric, seeking to detail escalation dynamics between Russia and the US/NATO.9 This paper will not reinvent the wheel by cataloging the totality of Russian official statements and military actions. It will instead review them through the prism of Russia's strategic deterrence and seek to answer the questions: How have Russian officials signaled? What do these signals mean? What is the implication of these signals and their perceived success for the role of nuclear weapons in Russia's overall deterrence strategy?

Russia's strategic deterrence is an approach that seeks to incorporate nonmilitary and military (nuclear and nonnuclear) means into a continuous spectrum of actions for deterrence, escalation management, and warfighting. Nuclear weapons are the foundation of credible strategic deterrence and signaling with these and other strategic capabilities could in theory be instrumental for deterring the escalation of a local conflict to a regional war. In practice, Russia's use of strategic deterrence signaling in this conflict has been met with mixed results insofar as it has not compelled the cessation of or constraints on Western lethal aid to Ukraine, even though it may have deterred direct Western intervention. Russian officials' threats to use nuclear weapons have also challenged Russia's status as a responsible great power status and threatened its relations with India and China.

This paper begins with a conceptual foundation and then categorizes Russian approaches to strategic deterrence signaling since February 2022. It then focuses on the potential meaning of Russian signals and concludes with a discussion of the role of nuclear weapons in Russian strategy.

Nuclear Kremlinology

Russian nuclear signaling during the war in Ukraine does not exist in a vacuum. Officials in the Kremlin have extensive personal experience with and a historical perspective of rhetoric and actions involving nuclear weapons. This section lays out how Russian military thinkers conceive nonmilitary and nonmilitary strategic deterrence steps involving nuclear weapons.

Nuclear weapons in US-Russian crises

The history of interactions between Moscow and Washington features numerous crises that involved the threats of nuclear weapons use. Soviet Union's leader Nikita Khrushchev is perhaps best known for pioneering the "madman" approach to nuclear deterrence, as he tussled with US leaders during showdowns in Berlin and Cuba. ¹⁰ In these crises, Khrushchev not only made numerous verbal threats, but the Soviet military also engaged in posture shifts and the testing of nuclear devices. The peaceful resolution of the Cuban Missile Crisis for eventual bilateral efforts to reduce the risk of nuclear war between the two Cold War superpowers. ¹¹ But even after some of these efforts began, Washington and Moscow sought to manipulate nuclear risks during times of tension.

Khrushchev's nuclear threats were not met with the success he intended. This was largely because shaping the behavior of opponents for deterrence or compellence through coercion with nuclear weapons is not easy. ¹² Even issuing a "threat that leaves something to chance" with concomitant ambiguities may not work the way a threatener intends. Signals can be also missed or misunderstood. Some Western scholarship examining nuclear crises during and after the Cold War suggests that nuclear threats can work in deterring an attack on oneself but may not be as useful when one is seeking to compel or engage in nuclear bluster to enable conventional aggression. ¹³

Putin has some experience with nuclear signaling, though its outcomes are analytically inconclusive. For example, there is a debate about the extent to which threats made by Putin and other Russian officials and Russian military signals were useful to the achievement of Russia's goals during its 2014 annexation of

^{10.} For a discussion of these nuclear crises see A. Fursenko and T. Naftali, *Khrushchev's Cold War: The Inside Story of an American Adversary*, New York: W. W. Norton, 2006, and W. Taubman, *Khrushchev: The Man and His Era*, New York: W. W. Norton, 2003.

^{11.} A. Kokoshin, "Reflections on the Cuban Missile Crisis in the Context of Strategic Stability," Belfer Center, September 2002, available at: www.belfercenter.org.

^{12.} T. Davis Biddle, "Coercion Theory: A Basic Introduction for Practitioners," *Texas National Security Review*, February 20, 2020, available at: tnsr.org.

^{13.} See T. S. Sechser and M. Fuhrmann, *Nuclear Weapons and Coercive Diplomacy*, Cambridge: Cambridge University Press, 2017.

Crimea. Western analysts have detailed the nuclear language, bomber diplomacy, and an increase in nuclear-related exercises that served as the backdrop to the annexation. A 2014 report of the US State Department's International Security Advisory Board noted that the Crimea "crisis involve[d] nuclear states but [was] not a nuclear crisis and [the United States] should take no action implying otherwise." Much has also been made of Putin's 2016 statement in an interview to a Russian audience that he considered putting Russian nuclear weapons on alert at the time. But in that same interview, he also extensively highlighted the nonnuclear capabilities that enabled the Russian forces to carry out the annexation. Some analysts have noted Russian nuclear signaling may have been so confusing that, while "it had an influence on the Ukraine crisis by defining its limits," its true impact may have been challenging to assess.

More than eight years after Russia's annexation of Crimea, Western policy, scholarship, and advocacy has focused extensively on the challenge of potential Russian nuclear employment in the ongoing war in Ukraine. Despite frequent periods of Western concern, media frenzy, and social media agitation about the possibility of Russian nuclear escalation following nuclear rhetoric by Russian officials, Putin has not made the decision to employ nuclear weapons as of this writing. This is despite initial concerns from observers that he may be irrational, erratic, or mix nuclear weapons and religion in potentially apocalyptic ways. ¹⁹ In May 2023, a senior US intelligence official stated that the US intelligence community viewed Russian nuclear use in Ukraine as "unlikely." ²⁰ Earlier in the spring, unnamed US officials also suggested to reporters that Putin may have come to the conclusion that his nuclear threats may have been counterproductive. ²¹ Despite this, some Western analysts still have argued that it's only a matter of time until Putin presses "the button." ²² In short, Russia's extensive nuclear signaling in 2022 and its nuclear nonuse to date are a puzzle.

^{14.} D. Adamsky, "Cross-Domain Coercion: The Current Russian Art of Strategy," *Proliferation Paper*, No. 54, Ifri, November 2015, available at: www.ifri.org.

^{15. &}quot;Report on U.S.-Russia Relations," Department of State International Security Advisory Board, December 9, 2014, available at: 2009-2017.state.gov.

^{16. &}quot;Владимир Путин : Чтобы защитить Крым, мы готовы были развернуть ядерное оружие Читайте на [We Were Ready to Deploy Nuclear Weapons to Protect Crimea]", KP, August 24, 2016, available at : www.kp.ru.

^{17.} ibid.

^{18.} J. Durkalec, "Nuclear-Backed 'Little Green Men': Nuclear Messaging in the Ukraine crisis," PISM, July 2015, available at: pism.pl.

^{19.} D. Adamsky, "Russia's Menacing Mix of Religion and Nuclear Weapons," *Foreign Affairs*, March 5, 2022, available at: www.foreignaffairs.com; S. Sagan, "The World's Most Dangerous Man," *Foreign Affairs*, March 16, 2022, available at: www.foreignaffairs.com; and E. Geist, "Is Putin Irrational? What Nuclear Strategic Theory Says About Deterrence of Potentially Irrational Opponents," RAND Blog, March 8, 2022, available at: www.rand.org.

^{20.} P. Stewart and I. Ali, "Russia 'Very Unlikely' to Use Nuclear Weapons, US Intel Chief," Reuters, May 4, 2023, available at: www.reuters.com.

^{21. &}quot;Fears of Russian Nuclear Weapons Use Have Diminished, but Could Re-emerge," *The New York Times*, February 3, 2023, available at: www.nytimes.com.

^{22.} K. Ryan, "Why Putin Will Use Nuclear Weapons in Ukraine," *Russia Matters*, May 17, 2023, available at: www.russiamatters.org.

Russian signaling and strategic deterrence

The best way to understand Russian signaling is through the prism of the Russian military-theoretical concept "strategic deterrence." Russian strategic deterrence is a set of theoretical constructs developed by Russian military theorists that seek to incorporate nonmilitary and military means into a continuous spectrum of actions for deterrence, escalation management, and warfighting. ²³ The Ministry of Defense dictionary defines it as "a system of forceful (military) and non-forceful (nonmilitary) measures, intended to restrain the other side from employing force against the Russian Federation, particularly on a strategic scale." ²⁴ Western analysts have written extensively about the concept and its evolution. ²⁵ In these pages, strategic deterrence has been referred to as "cross-domain coercion." ²⁶

Strategic deterrence is a term firmly embedded into Russian declaratory policy. The 2023 Russian Foreign Policy Concept, released during the war in Ukraine, notes the importance of "strategic deterrence, preventing the aggravation of interstate relations to a level capable of provoking military conflicts, including [conflicts] with the use of nuclear and other types of weapons of mass destruction." The term is closely related to and somewhat overlaps with the Russian understanding of nuclear deterrence. In Russian doctrinal documents, nuclear deterrence policy is explained as "set of coordinated, unified by a common concept, political, military, militarytechnical, diplomatic, economic, information, and other measures carried out relying on the forces and means of nuclear deterrence, to prevent aggression against the Russian Federation and (or) its allies."28 Nuclear deterrence is aimed at the "protection of sovereignty and territorial integrity of the state, deterrence of a potential adversary from aggression against the Russian Federation and (or) its allies, and in the event of an outbreak of a military conflict—the prevention of the escalation of military actions and their cessation on conditions acceptable to the Russian Federation and (or) its allies."29 But while nuclear weapons are the foundation of strategic deterrence, the concept also encompasses nonnuclear and nonmilitary capabilities.

^{23.} M. Kofman, A. Fink and J. Edmonds, "Russian Strategy for Escalation Management: Evolution of Key Concepts," CNA, April 2020, available at: www.cna.org.

^{24. &}quot;Стратегическое сдерживание [Strategic Containment]", Encyclopedia of the Ministry of Defense of the Russian Federation, available at: encyclopedia.mil.ru.

^{25.} K. Ven Bruusgaard, "Russian Strategic Deterrence," Survival: Global Politics and Strategy, Vol. 58, No. 4, 2016.

^{26.} D. Adamsky, "Cross-Domain Coercion: The Current Russian Art of Strategy," op. cit.

^{27.} Point 27 of the Foreign Concept of the Russian Federation, March 2023, available at: <u>russiaeu.ru</u>. 28. "Foundations of the State Policy of the Russian Federation in the Area of Nuclear Deterrence," 2020, Informal translation by the CNA Russia Studies Program, available at: <u>www.cna.org</u>.

^{29. &}quot;Foundations of the State Policy of the Russian Federation in the Area of Nuclear Deterrence," op. cit.

In Russian military theory, strategic deterrence steps operate in various conflict stages—from the period of military threat and all the way up to large-scale war.³⁰ These conflict stages are defined in Russian military doctrine³¹ (see Table 1). Military writings suggest that nuclear weapons use may come into play at the regional level of war, the basic construct of a war involving Russia and the US/NATO states.³² However, a nuclear conflict may arise at any time and can swiftly escalate. Nuclear conflict is not defined in Russian military doctrine. However, authoritative Russian military analysts define it as a point long before use where states use nuclear weapons as an instrument of "political or military pressure."³³ This appears to be the case with the war in Ukraine, which started out as a local war, in Russian doctrinal terms, but has been messaged by the Russian leadership as potentially having escalated beyond a local war to a war against the "collective West" (and thus potentially a regional war) because of Western lethal aid and other assistance to Ukraine.³⁴

Russian declaratory policy suggests certain scenarios in which Russia could use nuclear weapons. These include the following: receipt of credible information that a ballistic missile attack is incoming; an adversary uses nuclear weapons or weapons of mass destruction on Russian or allied territory; adversary strikes damage critical targets that could impact Russia's ability to retaliate; and in a conventional conflict that is escalating and Russia's existence is at stake.³⁵ However, Russian military writings also note that Russia's nuclear threshold may also be qualitative and somewhat subjective.³⁶ This threshold is judged by Russia's sole nuclear decision-maker, its President, according to declaratory policy documents.³⁷

More than a decade ago, Russian military theorists developed the concepts "nonnuclear deterrence" and "strategic deterrence through the use of military force," which appear in the 2014 Russian military doctrine.³⁸

^{30.} See, for example, A.V. Muntyanu and Yu. A. Pechatnov, "Проблемные методологические вопросы разработки механизма силового стратегического сдерживания [Challenging methodological Issues of the Development of the Mechanism of Forceful Strategic Deterrence]", Strategic Stability, No. 3, 2010.

^{31. &}quot;Военная доктрина Российской Федерации [Military Doctrine of the Russian Federation]," RG.ru, December 2014, available at : rg.ru.

^{32.} M. Kofman, A. Fink and J. Edmonds, "Russian Strategy for Escalation Management: Evolution of Key Concepts", *op. cit*.

^{33.} A. Kokoshin, I. Baluevskii, V. Esin and A. Shliakhturov, *Escalation and De-Escalation of Crises, Armed Conflicts, and Wars*, Cheltenham: Lenand, 2021.

^{34.} L. Hairemdinov, "Владимир ПУТИН: Нет ничего важнее и выше судьбы Отечества [Vladimir Putin: Nothing is More Important and Greater than the Fate of the Fatherland]," *Krasnaya Zvezda*, July 11, 2022.

^{35. &}quot;Foundations of the State Policy of the Russian Federation in the Area of Nuclear Deterrence," op. cit.

 $^{36. \} A.V. \ Muntyanu$ and Yu.A. Pechatnov, "Проблемные методологические вопросы разработки механизма силового стратегического сдерживания," $op.\ cit.$

^{37. &}quot;Foundations of the State Policy of the Russian Federation in the Area of Nuclear Deterrence," op. cit.

^{38.} See discussion of articles by Burenok, Pechatnov, and others in M. Kofman, A. Fink and J. Edmonds, "Russian Strategy for Escalation Management: Evolution of Key Concepts," *op. cit*.

These conceptual efforts arose from an understanding that nuclear threats may not be credible in conflicts below regional ones, like an armed conflict or a local war, where stakes are mismatched, and nuclear triggers as outlined in the doctrine are too high of a bar. Instead of nuclear weapons, the Russian military developed capabilities and doctrinal foundations to threaten damage on adversary critical targets with nonnuclear strategic capabilities.³⁹ According to authoritative Russian military analysts, such steps would also need to be properly messaged to have desired coercive effects.⁴⁰

Conceptually, strategic deterrence can be understood as being comprised of three levels concordant with the Russian military doctrine: local, regional, and global deterrence. ⁴¹ Global deterrence rests primarily on strategic nuclear weapons, regional deterrence (as in, deterrence of a regional war) on nonstrategic nuclear weapons and nonnuclear strategic weapons, and local deterrence (as in, deterrence of a local war) on nonnuclear strategic weapons. ⁴² Broadly, strategic deterrence is made credible by Russia's possession of nuclear weapons and the ability to signal to potential adversaries the ability to escalate all the way up to the strategic nuclear level. ⁴³

At the heart of strategic deterrence is the idea that certain demonstrative actions have an information-psychological component that can be used to buttress strategic deterrence. In this regard, authoritative Russian military thinker Andrei Kokoshin has used the concept "strategic gestures" describing certain steps that could exact an information-psychological impact on the adversary. To bolster in an adversary the perception that Russia has sufficient and credible retaliatory strike capabilities in peacetime, these gestures must be well thought out and based on an understanding of how the opponent thinks.⁴⁴ Kokoshin writes, "These strategic gestures must take into account the political psychology of the elite, and the population of the adversary's country. In the latter respect, it is important to understand the other side's political and military decision-making mechanisms, especially the ones that are used in crisis situations)."⁴⁵

In wartime, nonnuclear deterrence and certain strategic operations may involve demonstrative strikes on US or allied critical targets to inflict certain

^{39.} Ibid.

^{40.} A. Kokoshin, "Стратегическое ядерное и неядерное сдерживание: приоритеты современной эпохи [Strategic Nuclear and Non-Nuclear Deterrence: Priorities of the Modern Era]," *Bulletin of the Russian Academy of Sciences*, Vol. 84, No. 3, 2014.

^{41.} A.E. Sterlin, A.A. Protasov and S.V. Kreydin, "Современные трансформации концепций и силовых инструментов стратегического сдерживания [Modern Transformations of Concepts and Power Instruments of Strategic Containment]," *Military Thought*, No. 8, 2019.

^{42.} Ibid.

^{43.} Ibid.

^{44.} A. Kokoshin, "Ensuring Strategic Stability in the Past and Present: Theoretical and Applied Questions," Belfer Center, 2011, available at: www.belfercenter.org.
45. *Ibid*.

psychological effects on adversary leadership or populations.⁴⁶ In theory, Russia can take certain steps aimed at getting its opponents to take the action(s) that Russia would want them to take while also believing that such steps are in the opponent's own interests.⁴⁷ But tailoring strategic gestures and information-psychological efforts is obviously very challenging in practice.

Kokoshin and several other authoritative Russian military analysts have built out potential strategic deterrence steps. A combination of several of these approaches is depicted in Table 1. This table is not meant to offer blueprints, but merely examples of several analytical exercises.

The actions described in Table 1 touch on different domains, including space and cyber, and correspond to potential conflict characteristics and deterrence activities. These are useful to understand what steps we have and have not seen yet in Russia's strategic deterrence signaling during the war in Ukraine. Steps that Russian political and military officials have taken are outlined in the two sections that follow.

^{46.} See M. Kofman, A. Fink and J. Edmonds, "Russian Strategy for Escalation Management: Evolution of Key Concepts," *op. cit*.

^{47.} See useful discussion in T. Thomas, "Russia's Reflexive Control Theory: Manipulating an Opponent to One's Advantage," MITRE, June 2019, available at: apps.dtic.mil.

Table 1: Conflict scales and deterrence steps

Conflict scale	Conflict dynamics [3]	Potential deterrent steps [4]
Military threat (state characterized by real possibility of appearance of military conflict) [1]	 Aggravation of the situation, including the intensification of information confrontation Exchange of threatening statements about the possible use of military force An escalating political crisis with increased intensity of information confrontation, demonstrations of military force, but still without combat. Hybrid war, an integral part of which 	 Increase of combat readiness of the armed forces Threat to inflict damage on vitally important targets with nonnuclear means Conduct of demonstration tests of newest weapons systems Increase of non-forceful measures of political, economic, information nature Monitoring of the global military-political environment
Threatened period of war (period usually preceding war, particularly regional or large-scale) [2]	 is the limited combat use of military force along with the large-scale use of political, information-psychological, economic, and other means characteristic of hybrid warfare. Intentional or unintentional provocation (incident) in the interaction of great powers, which causes deaths and serious damage to military equipment. 	 Single use of precision strike on certain types of targets Threats to inflict damage on vitally important objects with nonnuclear means and nuclear weapons Demonstration actions by the armed forces
Local war (pursuit of limited political-military goals; military actions w/in borders of combating states and touch primarily on their interests)	Local conventional warfare with limited political goals of the opposing sides and limited use of military force in time and place, without the use of WMD and without the large-scale use of combat cyber operations in relation to civilian targets, with the involvement of only a certain part of general-purpose forces and conventional weapons.	 Grouped use of precision strike to inflict damage on targets on adversary territory Actions by general purpose forces
Regional war (pursuit of important political- military goals; with participation of several states from one region, led by national or coalition armed forces) [1]	 Regional war with combat operations on land, in the air, at sea without destroying spacecraft, with combat cyber operations on a larger scale than in a local war. Limited conventional warfare with defeat of spacecraft without destroying satellites of the missile attack warning system. See nuclear conflict, below. 	 Mass use of conventional precision strike Single and/or grouped use of nonstrategic nuclear weapons (NSNW) on adversary armed forces Demonstration use of nuclear weapons by strategic nuclear forces (SNF) or NSNW

Large-scale conventional war without destroying large urban centers, chemical industries, nuclear power plants, etc., with the use of cyber weapons only against military targets Large-scale war both in the theater and beyond. (pursuit of radical Large-scale conventional war with combat cyber operations aimed at goals, war between Mass use of NSNW on adversary disrupting the state administration coalitions of states system and destroying important Single and/or grouped use of or largest states of civilian infrastructure of the other nuclear weapons of SNF and/or global society) [1] side. NSNW on military-economic Conventional war with the disruption targets of the adversary of large urban centers, with the destruction of chemical industries and nuclear power plants. See nuclear conflict, below. Intentional or unintentional destruction by conventional means (ASW means) of SSBNs of one of the great powers (including by unidentified third party). Demonstration use of nuclear Nuclear conflict weapons in a desert area without hitting people, military, and economic (not in Russian infrastructure. military doctrine, War with the limited use of nuclear (See potential deterrent steps in weapons against military facilities, the but would regional and large-scale war) armed forces of the other side. potentially overlap Mass use of SNF and NSNW on War with the use of strategic nuclear military-economic targets of the with regional and forces in a counterforce operation adversary large-scale war) [3] with an attempt to avoid the destruction of the civilian population and important infrastructure of the enemy's economy. War with the massive use of nuclear weapons and other types of weapons of mass destruction, including against large urban centers.

Sources: [1] "Military doctrine of the Russian Federation", RG.ru, December 2014, op. cit.; [2] Threatened period of war definition in the MOD dictionary, available at: encyclopedia.mil.ru; [3] A. Kokoshin, Y. Baluevskii, V. Yesin and A. Shliakhturov, Escalation and De-Escalation of Crises, Armed Conflicts, and Wars, Cheltenham: Leland, 2021; [4] A.V. Muntyanu and Yu. A. Pechatnov, "Challenging Methodological Issues on the Development of the Mechanism of Strategic Deterrence through the Use of Military Force," Strategic Stability, No. 3, 2010.

Russian signaling in the war in Ukraine

Declaratory policy

Throughout the conflict, Putin and his surrogates have made numerous statements with aims to deter, compel, as well as to potentially misdirect their Western counterparts. As noted earlier in this paper, the vast majority of these statements have been cataloged in Western research.⁴⁸ This section will review the contours of nuclear rhetoric by Russian political and military officials.

Rhetoric by political leadership

Putin, according to his own statements, does not take nuclear rhetoric and nuclear coercion lightly. In discussing this issue with Western journalists in 2016, he said the following: "Brandishing nuclear weapons is the last thing to do. This is harmful rhetoric, and I do not welcome it." But six years later, Putin has engaged in extensive nuclear messaging. Photos of him at nuclear exercises in 2022 have been widely publicized. He has also made numerous speeches since the beginning of the war in Ukraine. Many of these have involved some coercive language toward the West. In one speech, as later reported by TASS in English, Putin expressed "certainty about Russians' support" with his policies and grimly stated: "Those who are trying to blackmail us with nuclear weapons should remember that the wind rose can turn in their direction." 50

Putin's rhetoric has consistently sought to message the following points to a Western audience:⁵¹

- Russia views this conflict as a "war with the collective West"
- A direct Western military attack on Russia is unacceptable

^{48.} L. Horovitz and A. C. Arndt, "One Year of Nuclear Rhetoric and Escalation Management in Russia's War Against Ukraine: An Updated Chronology," op. cit.

^{49. &}quot;Meeting of the Valdai International Discussion Club," President of Russia website, October 27, 2016, available at: en.kremlin.ru. He followed this with "But we must proceed from reality and from the fact that nuclear weapons are a deterrent and a factor of ensuring peace and security worldwide. They should not be considered as a factor in any potential aggression, because it is impossible, and it would probably mean the end of our civilization."

^{50. &}quot;Putin Concluded TV Address with Expression of Certainty about Russians' Support," TASS, September 21, 2022, available at: tass.com.

^{51.} L. Horovitz and A. C. Arndt, "One Year of Nuclear Rhetoric and Escalation Management in Russia's War against Ukraine: An Updated Chronology," op. cit.

- A direct Western military intervention into Ukraine is unacceptable
- Direct contact between Russian and US/NATO troops is unacceptable
- In certain situations, Russia may consider engaging in nuclear testing or shifting to a preemptive or first strike nuclear stance
- Despite the nuclear rhetoric, Russia seeks to ensure that the conflict does not escalate to the nuclear level

There have been some matters on which Putin's rhetoric has been ambiguous. For example:

- What capabilities will Russia use? Putin's rhetoric has focused on nuclear weapons, but has also referenced Russia's strategic nonnuclear capabilities
- What is Russian territory? Putin has referred to Crimea as "Russian Crimea" and suggested that the Donbass carries a similar status

Putin's deliberately ambiguous rhetoric has sought to warn, escalate, and at times to lower tensions, according to Western analyses.⁵² Messaging has primarily focused on ensuring that the West does not directly intervene into the Ukraine conflict. Putin's coercive rhetoric peaked in the spring of 2022 and once again in the fall of 2022 to coincide with the initial invasion and the Russian decision to annex the Donbass. Some nuclear rhetoric returned in the spring and early summer of 2023 to coincide with an increase in Western lethal aid and the beginning of a counteroffensive by Ukrainian forces, but, arguably, this rhetoric was not at 2022 levels.

Has Putin perceived diminishing marginal returns from his statements about nuclear weapons? The answer is not so clear at this point. To be sure, he has reportedly received pushback from political leaders in India and China. Putin has also discussed his frustration with what he has called as efforts by some to "inflam[e] the possibility that Russia might theoretically use nuclear weapons." He noted that these efforts are being used to "to influence our friends, our allies, and neutral states by telling them: look at whom you support, Russia is such a scary country, do not support it, do not cooperate with it, do not trade with it." He also stated in December 2022 that Russia wouldn't "brandish [nuclear] weapons like a razor, running around the world." But, where Putin's rhetoric has been ambiguous, the rhetoric of his surrogates has been much less so.

Rhetoric by civilian surrogates

Numerous official Russian surrogates have engaged in nuclear rhetoric. These have included Putin's spokesperson Dmitry Peskov and Russian Ministry of Foreign Affairs officials like Sergey Lavrov and Maria Zakharova, among others. Former Russian president (and now deputy chairman on the Security Council of the Russian Federation) Dmitry Medvedev has also emerged as a key surrogate, with his rhetoric at times going much farther than some others. These civilian surrogates' statements, all effectively tracked by Western analysts, have sought to echo Putin's talking points and clarify escalation/de-escalation messaging, and declaratory policy. These have included the following talking points:

- Official doctrine drives policy on nuclear use, which is "defensive"
- Russia's nuclear use would only be against an "existential" threat
- Crimea and all the annexed territories are considered Russian territory
- Risks of nuclear escalation, particularly resulting from Western aid to Ukraine, are high
- US and NATO allies should not transfer long-range weapons to Ukraine
- Western behavior is irresponsible, and Western officials are not hearing Russia's warnings
- Russia is a responsible nuclear power that initiated the P5 statement about the unacceptability of nuclear war

Medvedev's statements have at times gone beyond Putin's rhetoric. He has opined, among other points, that Russia could use nuclear weapons in case of a "defeat" and argued that nuclear weapons are the only reason that the West has not directly intervened against Russian forces in Ukraine. While his rhetoric is likely not officially sanctioned, it has also not been discouraged.

Rhetoric by military leadership

In contrast to the statements made by civilian surrogates discussed above, Russian military leaders have been more circumspect with nuclear rhetoric. As noted above, according to Russian declaratory policy, the Russian President is the only person who makes the decision to use nuclear weapons. However, the working assumption is that the options for the President are generated through the General Staff. And the perspectives of the Defense Minister Sergey Shoigu and the Chief of the General Staff Valeriy Gerasimov could potentially be very important because they are the other two people with nuclear briefcases. ⁵⁵ As potential messaging about command and control, the two men have appeared with Putin in the official photos and readouts of strategic deterrence forces exercises.

As is custom for his position, Shoigu has continued to make periodic speeches that outline the importance of continued modernization of Russia's nuclear forces for the purposes of nuclear deterrence.⁵⁶ But he has also been Putin's chief surrogate on part with his civilian counterparts. He has given speeches largely echoing Putin's framing of Russia being in a war against the "collective West." He has also sought to clarify nuclear rhetoric. For example, Shoigu was quoted at the August 2022 Moscow Conference on International Security as saying that, "from a military point of view, there is no need to use nuclear weapons in Ukraine to achieve set goals." He also referred participants to nuclear triggers outlined in Russian military doctrine and argued that reporting and leaks about potential chemical or nuclear use by Russia were "absolute lies." ⁵⁸

The threat of potential use of weapons of mass destruction (WMD) against Russia, a potential nuclear trigger in the military doctrine, has appeared in messaging by military officials throughout the conflict. Russian political and military leaders have made numerous references to biological, chemical, and radiological threats allegedly posed by Ukraine and the West to Russia. Early in the conflict, the Russian ministry of Defence (MOD) launched an extensive public relations campaign aimed at convincing Russia's population and international audiences of unfounded allegations that the United States had facilities able to produce bioweapons in Ukraine. These propaganda messages were repeated in numerous briefings by Russian MOD officials and also by MFA officials at the UN. Further, Russian officials have also claimed that Ukraine was interested in carrying out false flag operations using chemical or radiological weapons to blame these on Russia. In late October, Shoigu held calls with his Western counterparts laying out concerns about a potential dirty bomb attack by Ukraine, which Western officials argued intended simply to mask Russia's own potential efforts to escalate the conflict.59

In contrast to Shoigu, Gerasimov has had a much lower profile. In the fall of 2022, Western media reported that, "senior Russian military leaders... had conversations to discuss when and how Moscow might use a tactical nuclear weapon in Ukraine." Gerasimov then spoke with the US Chairman of the Joint Chiefs of Staff Mark Milley in late October and discussed nuclear use in Russian doctrine in ways that were consistent with the US understanding of doctrine, according to reports.

^{56. &}quot;Russia to Continue Developing its Nuclear Triad in 2023, Defense Chief Says," TASS, January 10, 2023, available at: tass.com.

^{57. &}quot;Шойгу заявил, что Россия не планирует применять на Украине ядерное или химическое оружие [Shoigu Says Russia has No Plans to Use Nuclear or Chemical Weapons in Ukraine]," Interfax, August 16, 2023, available at: www.interfax.ru. 58. *Ibid*.

^{59. &}quot;Russian Defense Minister Shoigu Holds Calls With U.S., Other NATO Counterparts Amid Escalation Fears," RFE/RL, October 23, 2022, available at: www.rferl.org.

^{60. &}quot;Russian Military Leaders Discussed Use of Nuclear Weapons, U.S. Officials Say," *The New York Times*, November 2, 2022, available at: www.nytimes.com.

^{61. &}quot;Fears of Russian Nuclear Weapons Use Have Diminished, but Could Re-Emerge," op. cit.

Military means

Since the beginning of the conflict, the Russian armed forces have conducted numerous actions that could be interpreted as strategic gestures. These have included capability demonstrations, symbolic increases in readiness, coercive encounters, and large-scale military and nuclear exercises. To date, Russia does not appear to have shifted the posture of its nuclear forces or conducted any concerning activities involving nuclear warheads, according to reports. In this regard, perhaps the most meaningful signal intended for a Western audience has been the Grom strategic deterrence exercises and other activities potentially aimed at buttressing Putin's nuclear rhetoric.

Capability demonstrations

Throughout 2022, Russia conducted tests of nuclear, nuclear-capable, and other military systems that have been under development or have been recently fielded. Some have been used as part of a messaging strategy while others have not. Putin has particularly focused on the *Sarmat* Intercontinental Ballistic Missile (ICBM) and the *Tsirkon* missile.

Some Russian capability demonstrations were clearly intended to send a message about the awesome power of Russian nuclear weapons to a domestic and international audience. For example, the test of the *Sarmat* ICBM in April 2022 was accompanied by Putin's speech in which he extolled the missile's ability to "safeguard Russia's security from external threats." Photos and videos of the system were also widely distributed and made available by the Russian MOD and television shows. 62 However, not all tests were publicly announced or used for messaging. For example, there was no advance information component to the second test of the Sarmat, conducted in February 2023, which reportedly failed. 63 Similarly, there was no advance reporting of June 2022 tests of a *Sirena-M* command ICBM that is reportedly part of the nuclear command and control system. 64 On the whole, the ICBM program testing numbers were not unusual in 2022. 65

Other capability demonstrations pertained to Russia's hypersonic and other capabilities that Putin has referenced as part of Russia's strategic deterrence capabilities aimed at countering the West. For example, the MOD and TASS reported on the continued deployment of the *Avangard* hypersonic glide vehicle in November 2022 and the formation of its second

^{62.} First part of the video is available here: www.arms-expo.ru.

^{63.} O. Liebermann and N. Bertrand, "US Believes Russia had Failed Intercontinental Ballistic Missile Test around when Biden was in Ukraine," CNN, February 22, 2023, available at: edition.cnn.com.

^{64.} P. Podvig, "Test of a Sirena-M Command Missile Reported," *Russian Strategic Nuclear Forces*, June 9, 2022, available at: <u>russianforces.org</u>.

^{65.} P. Podvig, "Missile Launches in 2022 and Plans for 2023," *Russian Strategic Nuclear Forces*, December 16, 2022, available at: <u>russianforces.org</u>.

regiment.⁶⁶ Another capability that received extensive attention in 2022 was the *Tsirkon* missile system. After tests, Putin himself sent off a *Tsirkon*-equipped frigate to patrol in the Atlantic in January 2023, which further sailed off the US East Coast, before sailing around Africa and the Arabian Sea and then into Eastern Mediterranean.⁶⁷ Official TASS news reports also suggested that the development, production, and preparations for deployment of the Poseidon nuclear-capable underwater drone were ongoing.⁶⁸

Russia also tested and militarily employed some capabilities in Ukraine, resulting in mixed success when it came to signaling. For example, Russia's vaunted *Kalibr* and Kh-101 missile systems reportedly did not perform as well as Russia had originally hoped, putting to question the theory and operational preparations necessary for demonstrative signaling with these capabilities as part of "nonnuclear deterrence." The MOD publicized in 2022 the use of the dual-capable Kinzhal aero-ballistic missile, also intended for nonnuclear deterrence missions, but Ukraine's ability to intercept it in 2023 has presented a counterpoint.

Increased readiness

The Russian armed forces have taken some steps to use readiness increases as signaling. For example, the infamous "special combat regime" in February 2022 involved increased manning across the whole of Russia's nuclear forces and early warning, relevant assets of aerospace forces, and nonnuclear deterrence capabilities.⁷¹ While Putin justified this initial step as being triggered by "unfriendly statements" about Russia from some leaders of NATO nations, he may also have been concerned about a potential interest in a direct intervention by the West in Ukraine. ⁷²

Also, there was news of an increase in alert levels to Russia's counter-WMD forces in September-October 2022 during the period of expressed Russian concerns about the possible use of a dirty bomb in Ukraine.⁷³ This was potentially intended to improve the credibility of the Russian claims of

^{66.} P. Podvig, "First *Avangard* Regiment is Complete, Second One is being Deployed," *Russian Strategic Nuclear Forces*, November 18, 2022, available at: <u>russianforces.org</u>.

^{67.} G. Falconbridge, "Putin Deploys new *Zircon* Hypersonic Cruise Missiles to Atlantic," Reuters, January 4, 2023, available at: www.reuters.com.

^{68.} G. Falconbridge, "Russia Produces First Set of Poseidon Super Torpedoes – TASS," Reuters, January 16, 2023, available at: www.reuters.com.

^{69.} D. Nicholls, "Putin's Missile Crisis: Failure to Destroy Key Targets Blamed on 'Dud' Weapons," *The Telegraph*, March 25, 2022, available at: www.telegraph.co.uk.

^{70.} For MOD announcement, see "March 19, 2022 Russia-Ukraine News," CNN, March 20, 2022, available at: www.cnn.com.

^{71. &}quot;Putin Orders 'Special Service Regime' in Russia's Deterrence Force," op. cit.

^{72.} L. Horovitz and A. C. Arndt, "One Year of Nuclear Rhetoric and Escalation Management in Russia's War against Ukraine: An Updated Chronology," *op. cit*.

^{73.} L. Seligman, "West Rejects Russia's 'Dirty Bomb' Claim as Moscow Activates counter-WMD Forces," *Politico*, October 24, 2022, available at: www.politico.com.

an alleged impending Ukrainian plan, which encountered extensive skepticism in Western circles.

While there were Western revelations about a Russian military leadership discussion about potential scenarios of nuclear use, there has been no stated or reported transport of warheads or other "muscle movements" by the Russian armed forces that have been publicly confirmed by the US or other Western government sources. Presumably, such movements would also need to be communicated by the Russian military in order to achieve the desired coercive effects.

Close encounters

78. Ibid.

Russian forces have engaged in close encounters with US and NATO aircraft and vessels. These types of activities were novel during the 2014 Ukraine crisis, but they may now have become routine. Western analysts suggest that Russian forces engage in such activities to both deter and compel their Western counterparts, but most likely these actions are generally highly reactive.⁷⁴

Some incidents have predictably occurred around the Black Sea. In September, a Russian aircraft released a missile at a RAF aircraft over the Black Sea.⁷⁵ Perhaps the most notable incident involved the downing of a US drone operating over the Black Sea in March 2023 by two Russian fighters.⁷⁶ These actions have sought to harass Western forces and keep them out of close proximity to territory claimed by Russia or from providing intelligence support to Ukraine.

More recently, there have been incidents of Russian harassment of US forces over Syria. These have included reports of Russian aircraft firing at US drones over Syria in the fall of 2022.⁷⁷ Russian aircraft have also entered into US-controlled airspace without advanced deconfliction and conducted unsafe intercepts in the first part of 2023.⁷⁸ By conducting such out of theater coercive activities, Russian forces may be signaling their ability to threaten US interests in Syria.

^{74.} S. Charap *et al.*, "Understanding Russian Coercive Signaling," RAND, 2022, available at: www.rand.org.

^{75.} W. Bowen, "Russian Harassment of NATO Aircraft and Escalation Risk," King's College London, April 20, 2023, available at: www.kcl.ac.uk; J. Gregory, "Russian Jet Released Missile near RAF Aircraft over Black Sea," BBC, October 20, 2022, available at: www.bbc.com.

^{76.} O. Liebermann, J. Hansler, H. Britzky and N. Bertrand, "Russian Fighter Jet Forces down US Drone over Black Sea," CNN, March 15, 2023, available at: www.cnn.com.

^{77.} C. Gordon, "Russia Ups Its Dangerous Behavior in Syria With 'Unprofessional' Flying, Missile Shot at MQ-9," *Air & Space Forces Magazine*, April 20, 2023, available at: www.airandspaceforces.com.

Military exercises

Russian military exercises generally follow a relatively predictable cycle with increased rates of activity following efforts to improve readiness beginning over a decade ago after the war in Georgia and poor performance. Most of these exercises are reported on the website of the Russian Ministry of Defense, and some are covered in the press. Major exercises may also be formally briefed in advance to foreign defense attaches.

In early 2022, Russia notified its counterparts in the OSCE that it would no longer participate in the data exchange or host foreign observers at its military exercises as required by the Vienna Document.⁷⁹ Numerous exercises and training activities swiftly followed. In March 2022, the Russian forces conducted "a series of large-scale naval exercises in training to repel sea and ocean military threats to Russia," including nuclear submarines in the Barents Sea.⁸⁰ In May, the Baltic Sea Fleet (*Baltflot*) reported of the conduct of launches of Iskander missiles in Kaliningrad, conducted in an environment of radioactive and chemical contamination.⁸¹

The Russian military training season usually culminates in a large command staff exercise on a regional and strategic level. In September 2022, Russia conducted the Vostok exercise. This exercise involved, according to reports, "over 51,000 military personnel from 14 foreign states. A specific element of the exercise was the establishment of an international group of forces for addressing common tasks." It was briefed to foreign military attaches. 4

More recently, the Russian military appears to have altered the predictable rotation of large-scale exercises. For example, in December 2022, Shoigu announced the intent to conduct Zapad exercise in the second part of 2023 instead of the expected *Tsentr* exercise, but it has been later announced that it would not take place this year. ⁸⁵ Zapad, which last took place in September 2021, is usually intended to demonstrate Russian and Belarusian

^{79.} G. R. Hernandez, "Russia Refuses Annual Vienna Document Data Exchange", *Arms Control Today*, March 2023, available at: www.armscontrol.org.

^{80. &}quot;Meeting of Defence Ministry Board," Kremlin.ru, December 21, 2022, available at: www.en.kremlin.ru.

^{81. &}quot;В Калининградской области комплексы 'Искандер' ударили по 'противнику' [In the Kaliningrad Region, Iskander System Hit the 'Enemy']", Vesti, May 4, 2022, available at: www.vesti.ru.

^{82. &}quot;Vostok-2022 Strategic Command Post Exercise," Kremlin.ru, September 6, 2022, available at: www.en.kremlin.ru.

^{83. &}quot;Meeting of Defence Ministry Board," Kremlin.ru, December 21, 2022, available at: www.en.kremlin.ru.

^{84. &}quot;В России начинаются стратегические маневры «Восток-2022» с участием 50 тыс. Военных, [Strategic Maneuvers 'Vostok-2022' with the Participation of 50 Thousand Military Men Begin in Russia]," Interfax, September 1, 2022, available at: www.militarynews.ru.

^{85. &}quot;Шойгу: в следующем году ВС РФ нужно провести учения 'Запад-2023' [Shoigu: Next Year the Russian Armed Forces Need to Conduct Exercises 'West-2023']," TASS, December 21, 2022, available at: tass.ru.

efforts to counter a threat from the West.⁸⁶ Given the stated presence of Russian nuclear weapons in Belarus, discussed later in this paper, Zapad may provide opportunities for additional signaling using Belarusian forces.

Grom strategic command-post exercises

In 2022, Russia conducted two medium-to-large-scale nuclear exercises. These took place in February, preceding the invasion, and in October, its usual timeframe following the completion of the summer training season.

The Grom strategic nuclear exercise hadn't been conducted since 2019, when it was first publicly named and widely publicized.⁸⁷ Grom 2019 involved 12,000 personnel and test launches of SLBMs and cruise missiles from Northern and Pacific fleets, Tu-95 from LRA (Long Range Aviation), Northern Fleet and Caspian Sea Flotilla with *Kalibr*, and *Yars*, and some *Iskander*-M from Army artillery & missiles troops.⁸⁸

The first Grom in 2022 took place right before the Russian invasion of Ukraine. In publicly released photographs, Putin is pictured sitting next to the Belarusian leader Aleksandr Lukashenka. ⁸⁹ The MOD released numerous videos with the details for the exercise, which engaged strategic nuclear and nonnuclear forces. ⁹⁰ These included VKS (Russian Aerospace Forces) with *Kinzhal* and Tu-95 launching cruise missiles, *Iskander* launches from Astrakhan, RVSN (Strategic Rocket Forces), Northern and Black Sea Fleet *Kalibr* and *Tsirkon*, *Yars*, Barents launches of Sineva, but no SLBM launch from the Pacific fleet. According to the Chief of the General Staff the main goal of the exercise was to "work out procedures that allow strategic offensive forces to deliver guaranteed defeat to an adversary." ⁹¹

During the second Grom exercise of the year, which took place in October, Putin was photographed on the screen alongside Gerasimov and Shoigu—the other two people in the chain of nuclear command.⁹² The script for the exercise included the rehearsal of a mass nuclear strike by strategic

^{86.} M. Kofman, "Zapad-2021: What to Expect from Russia's Strategic Military Exercise," *War on the Rocks*, September 8, 2021, available at: <u>warontherocks.com</u>.

^{87. &}quot;Russia's Strategic Exercises: Messages and Implications," NATO Stratcom Centre of Excellence, July 2020, available at: stratcomcoe.org.

^{88. &}quot;Военные учения 'Тром-2019' [Military Exercises Grom-2019]", Kremlin.ru, October 17, 2019, available at : www.kremlin.ru.

^{89. &}quot;Учение сил стратегического сдерживания [Strategic Deterrence Exercise]," op. cit.

^{90. &}quot;Под руководством Верховного Главнокомандующего ВС РФ были проведены учения сил стратегического сдерживания [Under the Leadership of the Supreme Commander-in-Chief of the Armed Forces of the Russian Federation, Exercises of the Strategic Deterrence Forces were Held]," МОD, February 19, 2022, available at: function.mil.ru and "Учение сил стратегического сдерживания," *op. cit*.

^{91. &}quot;Генштаб РФ: на учениях отработан вопрос санкционирования и массированного применения стратегических сил в ответно-встречном ударе [The General Staff of the Russian Federation: the Issue of Sanctioning and Massive Use of Strategic Forces in a Retaliatory Strike was Practiced during the Exercises]," Interfax AVN, February 19, 2022, available at: www.militarynews.ru.

^{92.} Telegram Channel of the Russian MOD.

offensive forces in retaliation. The forces involved included Yars, Tula SSBN launch of Sineva, and LRA's Tu-95. 93

While the February 2022 Grom exercise was grand in scale, it is challenging to compare it to the 2022 October exercise. More data is necessary (potentially from the Grom exercises in 2023 and 2024) to determine the extent to which the exercise was larger than usual. The extensive visuals and public information provided by the MOD about the exercise definitely point to a desire to use these exercises for messaging the ability of Russia's strategic nuclear forces to carry out a nuclear strike.

International dimension

Since the beginning of the war in Ukraine, Russia has taken a variety of messaging steps on the international stage. These have included threats to treaty regimes, P5 statements on nuclear war, "nuclear sharing" with Belarus, and military cooperation with foreign states. These activities appear to be primarily aimed at signaling to the West and the world about Russia's great power status.

Treaty regimes

Several times over the past year, Putin has used the threats of treaty withdrawals as well as actual treaty withdrawals for signaling. At the same time, his surrogates have signaled some restraint by pointing to Russia's compliance with other treaty obligations.

New START is a great example of this approach. In December 2022, Russian officials canceled a meeting of the Bilateral Consultative Commission (BCC) that was intended to help resolve the issue of Russia's stated inability to accept on-site inspections after the pause on these practices during COVID. In February, Putin announced that Russia would suspend participation in the Treaty, but kept complying with it. Russian officials cited concerns about on-site inspections and potential treaty facilitation of Ukrainian strikes on Russia. With this, Putin was potentially signaling that he was open to destroying the bilateral mutual deterrence relationship between the United States and Russia that has persisted since the Cold War. He gave the United States a choice: Ukraine or the bilateral strategic stability relationship.

In March, Putin also seemed to raise the possibility of Russia resorting to nuclear testing, particularly if the United States reconsidered its nuclear testing moratorium (this reconsideration is an unlikely proposition). Russia has been a member of the Comprehensive Nuclear Test Ban Treaty (CTBT)

^{93. &}quot;Министр обороны России доложил Верховному Главнокомандующему Вооруженных Сил Российской Федерации о результатах проведения тренировки стратегических сил сдерживания [The Minister of Defense of Russia Reported to the Supreme Commander of the Armed Forces of the Russian Federation on the Results of the Training of the Strategic Deterrence Forces]," MOD, October 26, 2022, available at: function.mil.ru.

since 2002, though the US has questioned its compliance with the treaty. US officials have maintained that Russia has conducted nuclear testing that has generated yield noncompliant with a "zero-yield" testing standard, while Russia has denied these allegations. He Russian military carries out activities to certify its nuclear weapons at the Novaya Zemlya test site, and to date, it has chosen to not significantly publicize these activities. It is possible that Russia could choose to withdraw from the CTBT or conduct an explicitly non-CTBT compliant test as a means of signaling or potentially even conduct a nuclear explosion somewhere outside of the test site area. The only challenge in this regard is potentially reputational—as these actions would put Putin in the almost same league as his North Korean counterpart.

In May, upon Putin's request, Russian officials announced Russia's withdrawal from the Conventional Armed Forces in Europe (CFE) treaty. Russia suspended treaty participation in 2007 and ceased participation in the Treaty's Joint Consultative Group, signaling that it considered the matter of the CFE treaty adaptation—and, with it, other cooperative security efforts in Europe—firmly closed.

Statements about not wanting a nuclear war

Since before the beginning of the war in Ukraine, Russian officials have used statements about the undesirability of nuclear war for public messaging. This language was first resurrected during the kickoff of the now-defunct Strategic Stability Dialogue. At the bilateral summit in June 2021, the US and Russian presidents "reaffirm[ed] the principle that a nuclear war cannot be won and must never be fought." The bilateral statement was later echoed in documents signed by others, including by the P5 in June 2022. Russian officials later maintained they initiated it, potentially signaling deescalation. This points to a potential avenue of the P5 for quiet risk reduction engagement.

Nuclear sharing

Russia has begun to engage in what is probably best described as something it understands as NATO-like "nuclear sharing" with Belarus. Putin first announced upgrades to Belarusian aircraft and crew training, and then discussed the possibility of upgrading storage facilities in Belarus.⁹⁷ In May

^{94.} D. G. Kimball, "US Questions Russian CTBT Compliance," *Arms Control Today*, July/August 2019, available at: www.armscontrol.org.

^{95. &}quot;U.S.-Russia Presidential Joint Statement on Strategic Stability," The White House, June 16, 2021, available at: www.whitehouse.gov.

^{96.} L. Horovitz and A. C. Arndt, "One Year of Nuclear Rhetoric and Escalation Management in Russia's War against Ukraine: An Updated Chronology," op. cit.

^{97.} M. Korda and E. Johns, "We Know Where Russian Nuclear-Capable Aircraft will be Hosted in Belarus. What's Next?," *Bulletin of the Atomic Scientists*, April 24, 2023, available at: thebulletin.org.

2023, Russian military officials stated that Russia was working through legal procedures to transfer nonstrategic nuclear warheads onto Belarusian territory, even though these weapons would be under in Russian hands (or, presumably, under the guard of the Russian 12th Main Directorate of the MoD, responsible for nuclear warhead security and handling). 98 These steps are in contravention to Russia's longstanding rhetoric about the illegitimacy of NATO nuclear sharing arrangements. In carrying them out, Putin seems to be primarily interested in bringing Belarus even closer to Russia and enabling its leader Aleksandr Lukashenko to use explicit nuclear rhetoric, including against neighboring NATO allies. Lukashenka's early foray into this area, promising "nuclear weapons for everyone," suggests that Putin's approach seems to be paying off.99

Military cooperation

Throughout 2022, the Russian armed forces have also sought to carry out military-political engagement with China and other non-adversarial countries. Russo-Chinese activities included joint bomber patrols and exercises in 2022, among others. 100 Russia held a handful of exercises involving its allies in the Cooperative Security Treaty Organization as well as US adversaries and also engaged in several pre-planned exercises with US partners such as Egypt, India, and others. In this vein, the Russian armed forces also hosted the Moscow International Security Conference that featured extensive international participation and high-level speeches from officials in non-adversarial countries. These were all part of Moscow's messaging that it was not isolated on the global stage.

^{98. &}quot;Russia and Belarus Sign Document on Tactical Nuclear Weapon Deployment," *The Moscow Times*, May 25, 2023, available at: www.themoscowtimes.com.

^{99. &}quot;Belarus's Lukashenko Says there can be 'Nuclear Weapons for Everyone'," Reuters, May 29, 2023, available at: www.reuters.com.

^{100. &}quot;Russian, Chinese Bombers Fly Joint Patrols over Pacific," AP News, November 30, 2022, available at: apnews.com.

Strategic gestures: potential escalation and effects to date

Steps not taken: transition from local war to regional war

Russian official rhetoric, focused on Russia's war with the "collective West" and the US use of Ukraine as a "proxy" to weaken Russia, suggests that the war carries existential stakes for the Russian leadership. One can thus imagine the transition of the war from a local conflict to a regional conflict, as described in Table 1. In doctrinal terms, the war has also potentially expanded from one where two parties focus on goals important to them to a war where more states are involved, and the stakes are much higher.

The war in Ukraine has so far primarily attritted Russian ground forces. Russian air, naval, and other capabilities have not been extensively employed. Hypotheses as to why have differed from an inability to effectively apply forces to the desire to limit action. Instead, Russian armed forces have demonstrated these capabilities in exercises, as discussed above, and used some of them to engage in extensive strikes on civilian targets and critical infrastructure in Ukraine. While the selection of these targets is part of a Russian military strategy, they may also have been intended to send a message to the West. If so, what message that could have been or for what purpose remains unclear. Certainly, Russian target selection and approaches to prosecuting the conflict have caused extensive Western outcry.

What other strategic gestures, beyond those noted above, could Russia carry out? Russia could potentially threaten to cut or cut Western undersea cables. Or, it could also engage in the dazzling or blinding of Western satellites. Russian officials have certainly suggested that even civilian space assets implicated in the war could be at risk. 102 It could also test other niche capabilities like direct energy or anti-satellite weapons. These steps may potentially carry fewer implications than a nuclear test, but they could also inflict collateral damage on assets of states non-adversarial to Russia.

Russia could also escalate to the use of cyber capabilities against Western targets and explicitly message that US and or allied critical

^{101. &}quot;The Escalating Global Risk Environment for Submarine Cables," Recorded Future, June 2023, available at: www.recordedfuture.com.

^{102. &}quot;Россия предупредила США о последствиях использования спутников на Украине [Russia Warned the US about the Consequences of Using Satellites in Ukraine]", *Lenta*, October 2022, available at: lenta.ru.

infrastructure are at risk. But research suggests that the effectiveness of Russia's cyber capabilities has been generally blunted in the conflict to date. 103

Russia could also carry out forceful nonnuclear deterrence (or an attack with conventional precision strike systems) against certain military or symbolic targets in NATO or in continental US. However, instead of serving as an intrawar deterrence step, any such Russian attacks would potentially trigger NATO Article V. A direct engagement between armed forces of both sides, something that Russian officials have warned against, would see the possibility of very rapid escalation and transition to nuclear use. This may suggest that, at least for now, Russian leaders do find NATO Article V to be an effective deterrent.

To date, Russia has not engaged in preparatory activities for nuclear weapons use when it comes to its launchers or warheads, or engaged in nuclear testing—all that could generate a reaction from the international public or a rebuke from India and China. Perhaps this is because this step is reserved for later in the conflict as it escalates, or perhaps the Russian leadership assesses that such gestures would not be effective.

Effectiveness of strategic gestures

In 2018, when Putin announced that Russia has been developing new nuclear capabilities and offered up a speech describing these systems, his deterrence messaging was clear. But the timing was puzzling. Why was there a need to unveil these weapons? Was it an invite to the United States to engage in arms control, with some of the new weapons as potential bargaining chips? Some years later, this remains unclear. Perhaps strategic gestures are much easier in theory than in practice.

As analyzed in this paper, Russian signaling, which began before the war in Ukraine, escalated during the first several months of the conflict and once again peaked in the fall of 2022. The first part of 2023 brought several peaks, but not as extreme as 2022. (While out of the scope of this paper, the year 2023 saw an extensive debate about the potential benefits and consequences of nuclear use in the Russian elites. ¹⁰⁴) This timing corresponded largely with Russian concerns about a direct Western intervention into the conflict in the spring and the Donbass referendums in the fall, as well as Russia's conventional setbacks in the conflict and increases in Western lethal aid. Putin himself made numerous speeches to domestic and international audiences. In these speeches, he signaled Russian stakes in the conflict, arguing that they are greater than the West's,

^{103.} J. Bateman, "Russia's Wartime Cyber Operations in Ukraine: Military Impacts, Influences, and Implications," Carnegie Endowment for International Peace, December 16, 2022, available at: carnegieendowment.org.

and that Russia was willing to escalate. Russia also used nuclear exercises to buttress the credibility of its declaratory policy.

Have Russia's strategic gestures been successful? What do the Russians themselves think? Medvedev has stated that he believed that Russia's nuclear status forestalled a Western intervention. However, in May 2023, he as well as Lavrov also complained that the West was not heeding Russia's warnings about the consequences of the transfer of Western lethal aid to Ukraine. This certainly suggests some recent concerns about signaling effectiveness.

It can be debated whether Western officials considered a direct intervention into Ukraine, or a no-fly zone in Ukraine, as serious options in the early months of the conflict. But signaling suggests that Moscow sought to deter these potential Western steps, and they may or may not have learned the lesson that deterrence with nuclear weapons can work. Compellence, however, is much harder. This is perhaps the reason why Russian officials have struggled with messaging and signaling around their concerns with Western lethal aid to Ukraine. Or maybe they never imagined that the Western coalition would be considering the provision of F-16 fighters to Ukraine.

Has the Russian approach to signaling impacted Moscow's credibility? It's possible that the fixation on WMD threats and biolabs have had implications for the effectiveness of Russian threats. While it may be the case that Putin judged past signaling ineffective, it's also probable that he is concerned that this would be detrimental to the international perception of Russia's great power status. The unintended consequence of Russia's approach to signaling includes the Western portrayal of Russia as an irresponsible nuclear power that is engaged in saber-rattling and the speculation about Putin's rationality.

Conclusion

With its emphasis on nuclear weapons in the war in Ukraine, Moscow has sought to recapture the historical superpower moment that allowed it to go toe to toe with the United States during the Cold War. Instead of being perceived as, in the words of former US president Barack Obama, a "regional power," Putin wants Russia to be perceived and viewed as a great power. In perhaps a somewhat unexpected turn, Western officials now discuss the possibility of Russia's "strategic defeat" and US President Joe Biden and other Western officials have referred to Putin as a "war criminal."

Nuclear weapons and Russia's status as a nuclear power on par with the United States have potentially enabled Russia's invasion and conduct of the war in Ukraine. The signaling approach adopted by the Russian political and military leadership to date has been aimed at providing Moscow with time and space to achieve its goals in the conflict. However, many questions about the role of nuclear weapons in the conflict remain.

For this analyst, the key question is why hasn't Russia escalated to nuclear or other WMD use? This is despite the poor conventional performance of Russia's armed forces, an increase in Western lethal aid to Ukraine, reports of US involvement in the targeting of Ukraine's precise weapons, and reports of the use of US and NATO military equipment in attacks on Russian territory. Has Putin been bluffing? Or has he not yet seen a case for dramatic escalation? Or does the Russian nuclear nonuse suggest the effectiveness of threats made by US officials to their Russian counterparts in the fall of 2022? Has the United States been able to deter Russian nuclear use or other false flag operations in Ukraine with preemptive disclosures of Russian plans or numerous high-level interventions? Or was deterrence the result of naming and shaming and Chinese and Indian interventions?

We may not decisively know the answers to many of these questions. It is also possible that, despite nuclear signaling, Russian officials have generally been escalation-cautious and focused on ensuring that the Ukraine war does not spill over into a conflict involving direct engagements between Russian and US/NATO forces.

Any Russian nuclear use, by virtue of its potential public impact as signaling in the conflict, would be a political and not a doctrinal decision. Any first use, be it the use of a nuclear weapon against Ukrainian forces or the infliction of damage on targets at sea, or a test, would fundamentally change the nature of conflict. Given the history of US revelations of Russian intentions, it is unlikely that Russia will achieve a surprise nuclear attack and thus be able to generate a shock among European and other global publics.

Once a nuclear weapon has been used, Russian leaders would have to confront the consequences of breaking the nuclear taboo and an inability to control their message, thus making their use even more ripe for interpretation by others.

What are the broader implications of Russian nuclear signaling? This is also open to interpretation. If one believes that Russia has successfully used nuclear weapons to enable its aggression in Ukraine and limit the scope of Western intervention, then this may carry implications for future great power conflict as well as disarmament, nonproliferation, and strategic stability. But others may argue that Russia's signaling simply points to the limits in the coercive power of nuclear weapons. In other words, they may be great for defending one's territory but not necessarily be effectively used for offensive and aggressive purposes. Still, others would argue that Russian nonuse to date may be explained by a careful Western policy that has sought to manage escalation. All of these perspectives, however, would have to contend with the enduring role of nuclear weapons in Euro-Atlantic security.

The Latest Publications of *Proliferation Papers*

- Jean-Louis Lozier, "Arctic: Toward the End of the Exception? Strategic, Nuclear and Maritime Issues in the Region", Proliferation Papers, No. 64, Ifri, April 2022.
- Corentin Brustlein, "<u>Strategic Risk Reduction between Nuclear-Weapons Possessors</u>", *Proliferation Papers*, No. 63, Ifri, January 2021.
- Brian Weeden, <u>"Current and Future Trends in Chinese Counterspace Capabilities"</u>, *Proliferation Papers*, No. 62, Ifri, November 2020.
- Emmanuelle Maitre, "<u>The Franco-German Tandem: Bridging the Gap on Nuclear Issues</u>", *Proliferation Papers*, No. 61, Ifri, January 2019.
- Corentin Brustlein, "<u>The Erosion of Strategic Stability and the Future of Arms Control in Europe</u>", *Proliferation Papers*, No. 60, Ifri, November 2018.
- Heather Williams, "<u>Tailored Assurance: Balancing Deterrence and Disarmament in Responding to NATO-Russia Tension</u>", *Proliferation Papers*, No. 59, Ifri, July 2018.
- John K. Warden, "<u>North Korea's Nuclear Posture: an Evolving Challenge</u> <u>for U.S. Deterrence</u>", *Proliferation Papers*, No. 58, Ifri, March 2017.
- William Alberque, "<u>The NPT and the Origins of NATO's Nuclear Sharing Agreements</u>", *Proliferation Papers*, No. 57, Ifri, February 2017.
- Ron Tira, "<u>The Future Middle East Strategic Balance: Conventional and Unconventional Sources of Instability</u>", *Proliferation Papers*, No. 56, Ifri, September 2016.
- Linton Brooks and Tom McKane, "<u>The Challenges of Maintaining Nuclear Cultures: U.S. and UK perspectives</u>", *Proliferation Papers*, No. 55, Ifri, January 2016.
- Dimitry Adamsky, "<u>Cross-Domain Coercion: The Current Russian Art of Strategy</u>", *Proliferation Papers*, No. 54, Ifri, November 2015.
- Feroz Hassan Khan, "Going Tactical: Pakistan's Nuclear Posture and Implications for Stability", Proliferation Papers, No. 53, Ifri, September 2015.
- Corentin Brustlein, "Conventionalizing Deterrence? U.S. Prompt Strike Programs and Their Limits", Proliferation Papers, No. 52, Ifri, January 2015.





27 rue de la Procession 75740 Paris cedex 15 - France