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THESIS

ESCALATE TO DE-ESCALATE:

SPECULATION ON RUSSIAN NUCLEAR STRATEGY

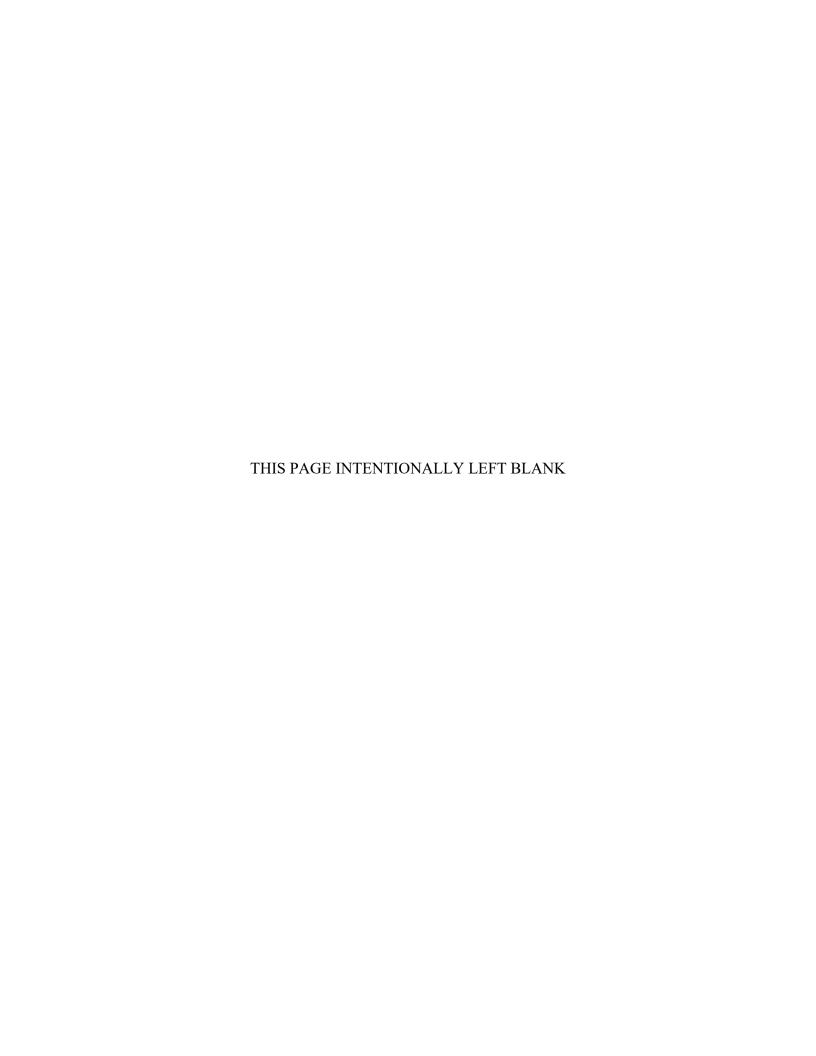
by

Frank R. Kirbyson III

September 2019

Thesis Advisor: Mikhail Tsypkin Second Reader: James A. Russell

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This thesis contributes to the debate regarding the Department of Defense's assessment that the Russian Federation possesses an "escalate to de-escalate" strategy. This research approaches the question through analysis of official doctrine, statements, nuclear capabilities and military exercises of the Russian Federation following the Cold War. The Russian Federation develops weapons for the employment of nonstrategic nuclear weapons and exercises the use of nonstrategic nuclear weapons during major exercises. Its official military doctrine is conducive to an "escalate to de-escalate" strategy. This research concludes that the Russian Federation assigns both an "escalate to de-escalate" and operational role for nonstrategic nuclear weapons. The Department of Defense is correct in its assessment of Russian nuclear strategy and should pursue initiatives that avoid legitimizing the use of nonstrategic nuclear weapons, contribute to strategic miscalculations, or set the conditions for a security dilemma between the United States and the Russian Federation.

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ESCALATE TO DE-ESCALATE: SPECULATION ON RUSSIAN NUCLEAR STRATEGY

Frank R. Kirbyson III
Major, United States Army
BS, Embry-Riddle Aeronautical University, 2006

Submitted in partial fulfillment of the requirements for the degree of

MASTER OF ARTS IN SECURITY STUDIES (STRATEGIC STUDIES)

from the

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Approved by: Mikhail Tsypkin

Advisor

James A. Russell Second Reader

Afshon P. Ostovar Associate Chair for Research Department of National Security Affairs THIS PAGE INTENTIONALLY LEFT BLANK

ABSTRACT

This thesis contributes to the debate regarding the Department of Defense's assessment that the Russian Federation possesses an "escalate to de-escalate" strategy. This research approaches the question through analysis of official doctrine, statements, nuclear capabilities and military exercises of the Russian Federation following the Cold War. The Russian Federation develops weapons for the employment of nonstrategic nuclear weapons and exercises the use of nonstrategic nuclear weapons during major exercises. Its official military doctrine is conducive to an "escalate to de-escalate" strategy. This research concludes that the Russian Federation assigns both an "escalate to de-escalate" and operational role for nonstrategic nuclear weapons. The Department of Defense is correct in its assessment of Russian nuclear strategy and should pursue initiatives that avoid legitimizing the use of nonstrategic nuclear weapons, contribute to strategic miscalculations, or set the conditions for a security dilemma between the United States and the Russian Federation.

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I. INTRODUCTION

This thesis examines the current debate among analysts who reach different conclusions regarding the Russian Federation's alleged "escalate to de-escalate" nuclear strategy. Between 1972 and 2010, the United States and the Soviet Union/Russia successfully signed seven major arms control treaties limiting strategic nuclear weapon capabilities. However, despite a lineage of cooperation between the U.S. and Russia, Russia refuses to enter negotiations with the United States regarding nonstrategic nuclear weapons, maintains a significant stockpile of nonstrategic nuclear weapons, and pursues the development of sophisticated delivery systems for nuclear weapons. The United States' Department of Defense (DoD) 2018 Nuclear Posture Review (NPR) suggests Russia's doctrine "threatens and exercises limited nuclear first use," otherwise referred to as "escalate to de-escalate" doctrine. Analysts and scholars arrive at opposing conclusions regarding Russia's actual policy on, and intended use for, nuclear weapons. This research concludes that Russia not only possesses an "escalate to de-escalate" strategy but assigns an operational role to its nonstrategic nuclear weapons.

A. SIGNIFICANCE

The criticality of the research question lies in confirming/denying the accuracy of the 2018 Nuclear Posture Review's assessment of Russia's policy on nuclear weapons. This is fundamentally important in that the Department of Defense's assessment of Russia's nuclear policy, strategy, and doctrine drives U.S. responses to perceived threats and greatly influences U.S. foreign policy options. The 2018 Nuclear Posture Review concludes, as a result of the DoD's assessment, that "the President must have a range of

¹ Amy Woolf et al., *Arms Control and Nonproliferation: A Catalog of Treaties and Agreements*, CRS Report No. RL33865 (Washington, DC: Congressional Research Service, 2018), https://fas.org/sgp/crs/nuke/RL33865.pdf.

² Amy Woolf, *Nonstrategic Nuclear Weapons*, CRS Report No. RL32576 (Washington, DC: Congressional Research Service, 2018), https://fas.org/sgp/crs/nuke/RL32572.pdf.

³ Department of Defense, *Nuclear Posture Review* (Washington, DC: Office of the Secretary of Defense, 2018), https://media.defense.gov/2018/Feb/02/2001872886/-1/-1/1/2018-NUCLEAR-POSTURE-REVIEW-FINAL-REPORT.PDF.

limited and graduated options, including a variety of delivery systems and explosive yields."⁴ Some scholars, who conclude the U.S. assessment of a Russian "escalate to deescalate" strategy is mistaken, believe that reacting to a flawed assessment increases the chances of a security dilemma between the United States and Russia.⁵ This thesis assists in understanding Russia's intentions which directly contributes to identifying viable policy options for the United States.

Confirming the U.S. assessment may not, however, reduce the risk of miscalculations between nuclear superpowers. Russia's recent focus on conventional and nuclear modernization involves the development of dual-capable delivery systems—missiles capable of delivering either precision conventional munitions or nuclear warheads. A mobilization of Russian dual-use systems in conjunction with a miscalculated belief that Russia is exercising a first-use strategy, set the conditions for a dangerous escalation from conventional to nuclear weapons. The Carnegie Endowment for International Peace warns that the danger associated with miscalculation is "underestimated by politicians and military experts—including Russia—because of a deeply rooted belief that escalation would be deliberate and not inadvertent." This research may clarify Russian intentions and, to a degree, either reduce ambiguity or eliminate nuclear fears during tense moments of potential or early conflict.

B. THE CURRENT DEBATE

The resultant policy repercussions from the DoD's 2018 Nuclear Posture Review's assessment of Russia's possible nuclear intentions revealed a debate among scholars and analysists who believe that a proper assessment of Russia's nuclear policy is vital in preventing the nuclear brinkmanship and a corresponding Russia-U.S. arms race reminiscent of the Cold War. The debate addresses not only the question of whether Russia possesses an "escalate to de-escalate" policy in terms of strategy within the international

⁴ Department of Defense, Nuclear Posture Review.

⁵ Olga Oliker, "Moscow's Nuclear Enigma," Foreign Affairs, 97, no. 6 (Nov/Dec 2018): 57, ProQuest.

⁶ Alexey Arbatov et al., *Russian and Chinese Perspectives on Non-Nuclear Weapons and Nuclear Risks*, (Washington, D.C.: Carnegie Endowment for International Peace, 2017), https://carnegieendowment.org/files/Entanglement_interior_FNL.pdf.

community but touches on subordinate questions as well. For instance, what is driving Russia's modernization and development of nuclear weapons? Is Russia simply balancing against U.S. and NATO nuclear capabilities? Does Russia rely on nuclear weapons to make up for shortcomings within its conventional forces? Why is Russia focusing on dual-capable delivery systems that allow a platform to deliver either conventional or nuclear weapons? Is a U.S. response of increasing nonstrategic nuclear weapon capabilities the appropriate course of action? Ultimately, the debate fuels the looming question and the fear of whether Russia is willing to use nuclear weapons in a conflict to persuade western powers against offensive action towards Russia.

Scholars and analysts generally fall into one of two camps in their assessments of Russian nuclear policy: either Russia has or has not adopted an "escalate to de-escalate" strategy. The arguments behind analysts' conclusions are mainly based on the same parameters addressed by the 2018 NPR. Proponents of the belief that Russia has adopted an "escalate to de-escalate" strategy infer that combining analysis of each parameter (Russian doctrine/policies, statements, weapons development, and exercises) indicates that Russia has adopted such a strategy. Opponents to this belief counter individual components of these cumulative assessments to provide explanations for Russian decision-making and behavior. Many arguments preface their stance with an interpretation of Russian doctrine and its changes since the fall of the Soviet Union. Russian doctrine, specifically towards the use of nuclear weapons, evolved since the fall of the Soviet Union but much debate remains over exactly how Russia views the role of nuclear weapons during warfare. Some scholars argue that Russian doctrine allows for the use of nuclear weapons to prevent local wars from becoming regional wars or to prevent western intervention during conflicts.⁷ In contrast to this view, others believe that recent versions of Russian doctrine (published in 2010 and 2014) restrict Russia in its use of nuclear weapons and that western analysts

⁷ Katarzyna Zysk, "Escalation and Nuclear Weapons in Russia's Military Strategy," *The RUSI Journal* 163, no. 2 (May 2018): 7, https://doi.org/10.1080/03071847.2018.1469267; Hans Kristensen and Robert Norris, "Russian Nuclear Forces, 2018," *Bulletin of the Atomic Scientists* 74, no. 3 (April 2018): 186–190, https://doi.org/10.1080/00963402.2018.1462912; Nikolai Sokov, "Why Russia Calls a Limited Nuclear Strike 'De-Escalation,'" Bulletin of the Atomic Scientists, March 13, 2014, https://thebulletin.org/2014/03/why-russia-calls-a-limited-nuclear-strike-de-escalation/.

misperceive the conditions under which that doctrine authorizes nuclear force. 8 Statements made by Russian officials regarding the use of nuclear weapons continue to fiercely fuel this debate. Officials' statements, to include those of President Putin, are well documented but severely lacking in clarity and intent⁹ and may be interpreted outside of their proper context. Some perceive Russia's modernization and development of nuclear weapons and corresponding delivery systems as supportive evidence of an "escalate to de-escalate" policy. 10 Opponents of the "escalate to de-escalate" conclusion combat this argument and suggest that Russia's modernization and weapons development are intended to balance against other states' capabilities, maintain parity, support deterrence and replace aging Soviet equipment. 11 Much debate also emerges as a result of analyzing Russian military exercises. A 2011 white paper from the Foreign Military Studies Office of the U.S. Army's Training and Doctrine Command G-2 concludes that Russian "simulated use of nuclear weapons during operational-strategic exercises denote its deeper reliance on weapons of "de-escalation." 12 Other analysts cast doubt on this conclusion and suggest that western audiences overlook details within Russian military exercises, and that some exercises may have served as unsuccessful proof of concepts that ultimately removed the idea of "escalate

⁸ Olga Oliker and Andrey Baklitskiy, "The Nuclear Posture Review and Russian 'De-escalation:' A Dangerous Solution to a Nonexistent Problem," War on the Rocks, February 20, 2018, https://warontherocks.com/2018/02/nuclear-posture-review-russian-de-escalation-dangerous-solution-nonexistent-problem/.

⁹ Olga Oliker, *Russia's Nuclear Doctrine: What We Know, What We Don't Know, and What That Means*, (Washington, DC: Center for Strategic and International Studies, 2016), https://csis-prod.s3.amazonaws.com/s3fs-public/publication/160504_Oliker_RussiasNuclearDoctrine_Web.pdf.

¹⁰ Mark Schneider, "Escalate to De-escalate," *Proceedings* 143, no. 2 (February 2017): 26–29, ProQuest.

¹¹ Hans Kristensen and Robert Norris, "Russian Nuclear Forces, 2018," *Bulletin of the Atomic Scientists*; Kristen Bruusgaard, "The Myth of Russia's Lowered Nuclear Threshold," War on the Rocks, September 22, 2017, https://warontherocks.com/2017/09/the-myth-of-russias-lowered-nuclear-threshold/; Oliker, *Russia's Nuclear Doctrine: What We Know, What We Don't Know, and What That Means.*

¹² Roger McDermott, *Russia's Conventional Military Weakness and Substrategic Nuclear Policy*, 2011 (Fort Leavenworth, KS: Foreign Military Studies Office, 2011), https://apps.dtic.mil/dtic/tr/fulltext/u2/a549120.pdf.

to de-escalate" from Russian military doctrine. ¹³ Amidst the debate regarding Russia's nuclear strategy, some suggest that Russia's ambiguity on the matter is intentional. ¹⁴

If Russia has adopted an "escalate to de-escalate" strategy, the most plausible explanation for doing so would be to balance the comparative weakness of Russia's conventional forces against those of the U.S. and NATO. According to some scholars, Russia assigns a military role to nuclear weapons to counter U.S. and NATO conventional advantages in precision weapons, mission command systems, and intelligence gathering. ¹⁵ Colby supports this belief and suggests Russia views nuclear weapons as a balance against the conventional capabilities of not only the U.S. and NATO but perhaps also China, and perceives nuclear weapons as a component of its "international prestige." ¹⁶ Further, a declassified report from the Central Intelligence Agency (CIA) quotes a Russian nuclear weapons laboratory director as stating tactical nuclear weapons provide Russia with a "viable alternative to advanced conventional weapons." Others, in believing Russia has an escalatory strategy, submit that ongoing sanctions and economic downturns hinder Russia's ability to modernize its conventional forces, resulting in a reliance on nuclear weapons. ¹⁸ This research concludes that the Russian Federation continues to rely on an

¹³ Oliker, Russia's Nuclear Doctrine: What We Know, What We Don't Know, and What That Means.

¹⁴ Elbridge Colby, *Nuclear Weapons in the Third Offset Strategy: Avoiding a Nuclear Blind Spot in the Pentagon's New Initiative*, (Washington, DC: Center for a New American Security, 2015), https://s3.amazonaws.com/files.cnas.org/documents/Nuclear-Weapons-in-the-3rd-Offset-Strategy.pdf?mtime=20160906082450; Elbridge Colby, *Russia's Evolving Nuclear Doctrine and its Implications*, (Washington, DC: Center for a New American Security, 2016), https://s3.amazonaws.com/files.cnas.org/documents/russias-evolving-nuclear-doctrine.pdf?mtime=20160906082509; Oliker, "Moscow's Nuclear Enigma"; Oliker, *Russia's Nuclear Doctrine: What We Know, What We Don't Know, and What That Means*.

¹⁵ Vasily Kashin and Michael Raska, Countering the U.S. Third Offset Strategy: Russian Perspectives, Responses and Challenges, PR 170124 (Singapore: RSIS, 2017), https://www.rsis.edu.sg/wp-content/uploads/2017/01/PR170124_Countering-the-U.S.-Third-Offset-Strategy.pdf; McDermott, Russia's Conventional Military Weakness and Substrategic Nuclear Policy.

¹⁶ Colby, Russia's Evolving Nuclear Doctrine and its Implications.

¹⁷ Central Intelligence Agency, Evidence of Russian Development of New Subkiloton Nuclear Warheads, (Washington, DC: Central Intelligence Agency, 2000), https://www.cia.gov/library/readingroom/docs/DOC 0001260463.pdf.

¹⁸ Steven Pifer, "Pay Attention, America: Russia is Upgrading its Military," *The National Interest*, February 3, 2016, https://nationalinterest.org/feature/pay-attention-america-russia-upgrading-its-military-15094.

escalate to de-escalate" strategy despite having greatly increased its ability to command and control large-scale military operations and is technologically capable of competing with Western militaries.

Conversely, the argument that Russia has not adopted an "escalate to de-escalate" strategy often centers around the evolution of Russia's doctrine and is supported by the suggestion that Russia is intentionally generating ambiguity as a form of deterrence. The fall of the Soviet Union ushered new security concerns for the Russian Federation and, in 1993, an updated military doctrine. Russia's 1993 Military Doctrine did not include a no first-use clause (which was an announced pledge by the former Soviet Union) for nuclear weapons and some argue that the Russian doctrine emphasized offensive, first-use nuclear weapons. 19 Since 1993, Russia published updated military doctrines in 2000, 2010, and 2014, which some analysts argue have since raised Russia's nuclear threshold from the 1993 and 2000 doctrines and are not conducive to an "escalate to de-escalate" policy. According to Bruusgaard, "Russia's doctrinal statements indicate an increased rather than decreased threshold."²⁰ Oliker states that Russia's current doctrine restricts the use of nuclear weapons to instances that either involve an attack on Russia with weapons of mass destruction or a conventional attack that jeopardizes the "very existence of the state."²¹ This research concludes that changes to Russia's military doctrine do not sufficiently rule out an escalatory strategy and are framed in such a fashion to allow for an "escalate to deescalate" strategy.

The Department of Defense's 2018 NPR, under no obligation to cite its sources, provides only a general set of assessments that cumulatively suggest that Russia may

¹⁹ Mikhail Tsypkin, "Evolving Russian Views on Nuclear Weapons and Their Significance for the United States and NATO," (unpublished, September 16, 2016); Woolf, *Nonstrategic Nuclear Weapons*; Alexi Arbatov, "The Transformation of Russian Military Doctrine: Lessons Learned from Kosovo and Chechnya," The Marshall Center Papers, No. 2 (Garmisch-Partenkirchen, Germany: George C. Marshall European Center for Security Studies, 2000),

https://www.marshallcenter.org/mcpublicweb/mcdocs/files/College/F_Publications/mcPapers/mc-paper_2-en.pdf.

²⁰ Bruusgaard, "The Myth of Russia's Lowered Nuclear Threshold."

²¹ Oliker and Baklitskiy, "The Nuclear Posture Review and Russian 'De-escalation:' A Dangerous Solution to a Nonexistent Problem."

possesses an "escalate to de-escalate" policy: Russia's policies/strategies/doctrine; officials' statements; weapons development; and military exercises.²² Most arguments on Russia's nuclear strategy focus on the four indicators outlined in the 2018 NPR and reach a conclusion based on a cumulative assessment. These parameters were additionally assessed by Bruusgaard, who stated that Russian nuclear strategy remains an understudied field.²³ Adding to an already complicated debate, Adamsky highlights inconsistencies between Russia's doctrine, policies, and nuclear capabilities and initiatives.²⁴ Adamsky suggests that nonstrategic nuclear weapons play a role in a Russian concept of regional deterrence but that the parameters surrounding the concept are unclear and lack synchronization with published policy.²⁵

Overall, most literature on the debate does not compare Russian policies and capabilities with those of the U.S. or China. Zysk accuses Russia of adopting an approach to nuclear war that shares similarities to that of NATO in the 1960s but does not offer a comparison of current U.S. and Chinese policy to that of Russia. Current literature does not conduct a comparative analysis of Russia's activities in relation to other global powers that may influence Russian policies and strategies.

C. METHODOLOGY

This research attempts to clarify Russia's current nuclear intentions through analysis of open-source, non-classified information. The conclusions reached from this research provide policy-makers with a better perception of potential threats from which to maintain or alter current U.S./NATO policies. Additionally, this research attempts to

²² Department of Defense, Nuclear Posture Review, 31.

²³ Kristin Bruusgaard, "Russian Nuclear Strategy" (lecture, Naval Postgraduate School, Monterey, CA, January 10, 2019).

²⁴ Dimitry Adamsky, "If War Comes Tomorrow: Russian Thinking About 'Regional Nuclear Deterrence," *The Journal of Slavic Military Studies* 27, no. 1 (March 2014): 163–188, http://dx.doi.org/10.1080/13518046.2014.874852.

²⁵ Adamsky, "If War Comes Tomorrow: Russian Thinking About 'Regional Nuclear Deterrence.""

²⁶ Zysk, "Escalation and Nuclear Weapons in Russia's Military Strategy.

identify those parameters that provide the best indicators of actual foreign nuclear intentions to eliminate unneeded analysis and analytical miscalculations.

This research primarily focuses on changes in Russia's doctrine, official statements, exercises and weapons development since the fall of the Soviet Union compared with those of the U.S. and China to determine if the degree to which Russia's actions differ from other nuclear competitors indicates an "escalate to de-escalate" strategy. The comparative analysis between nuclear superpowers may provide a baseline of mutual understanding through shared rationality. However, this thesis does consider Soviet-era methodology due to its persistent influence on current Russian strategic mindset.²⁷

A number of factors contribute to difficulties in this analysis: (1) the data analyzed is unclassified open-source information; (2) the data analyzed may be affected by interpretation (i.e., intent within Russian doctrine); (3) Russian activities and officials' statements often conflict with published doctrine and policies and; (4) there are no case studies that involve two or more nuclear state powers and the use of nuclear weapons to de-escalate a conflict. Current publications on this debate are well researched and clearly articulated despite the difficulties associated with identifying Russian nuclear intentions. Both proponents and opponents to the belief of Russia's alleged escalatory nuclear strategy support their conclusions with both empirical data and sound logic.

This research primarily draws from secondary sources to provide a starting point for further investigation. Referenced secondary sources provide three valuable advantages. First, much of the secondary source material provide empirical data in conjunction with contextual analysis. Second, these sources provide access to information in cases wherein primary source data is available only in the Russian language. Third, since secondary sources arrive at conflicting conclusions, these sources allow the research to weigh the validity of arguments against one another to determine which criteria best explains Russia's nuclear intentions. Available primary sources are used to validate key arguments posed by

²⁷ Mikhail Tsypkin, "Limited Nuclear Conflict and Escalation Control in Russian Military Strategy," (unpublished, September 16, 2018), 26.

secondary source analysis and to identify potential shortcomings in current secondary source analysis of the topic.

D. ORGANIZATION

This analysis to determine Russia's nuclear strategy is founded on the same parameters addressed by the 2018 NPR, and is divided into five chapters:

- 1. Introduction
- 2. Doctrine and Statements
- 3. Capabilities and Development
- 4. Exercises
- 5. Conclusions

This thesis examines the changes in Russian doctrine and policies from the fall of the Soviet Union to the recent 2014 doctrine and assesses those changes in relation to the security environment faced by the Russian Federation at the time. Russia's 1993 and 2000 doctrines provide guidance and policy that differ greatly from the doctrines of 2010 and 2014. This assessment of Russian doctrine within a particular security environment attempts to clarify how Russia frames nuclear strategy in terms of perceived threats and internal capabilities.

This thesis also examines Russia's military exercises to gain insight into Russia's nuclear intent. Analysts consider Russia's periodic Zapad and Vostok exercises as insights into Russia's strategies and their perceived threats. This research attempts to determine if these exercises definitively exhibit an "escalate to de-escalate" strategy.

Russia's recent focus on weapons development is assessed in the context of both the current and projected security environments. A review of Russia's capabilities development allows analysts to evaluate Russia's nuclear modernization with respect to its doctrine and exercises.

The conclusion of this research summarizes the findings in the analysis of the Russia's doctrine, statements, exercises, and weapons development as compared to its

security environment and the actions of the U.S. and China. This conclusion also provides policy and strategy implications for the U.S. contingent upon the thesis findings. Current U.S. policy is aimed at addressing an alleged "escalate to de-escalate" Russian strategy which may or may not serve as a viable course of action as the U.S. moves forward in its interactions with the Russian Federation.

II. DOCTRINE AND STATEMENTS ON NUCLEAR STRATEGY

A. INTRODUCTION

Russia's current military doctrine suggests an "escalate to de-escalate" strategy and operational role for nuclear weapons when compared to its preceding military doctrines and its State Policy on Naval Operations. The evolution of the Russian Federation's military doctrine suggests that Russia places emphasis on the importance of nuclear weapons but does not rely solely on nuclear weapons to determine success in any conflict or resolve conflicts early. Interpretation of Russia's military doctrine continues to fuel much of the debate as to whether Russia adopted an "escalate to de-escalate" nuclear strategy. Since the fall of the U.S.S.R., the Russian Federation created its first military doctrine in 1993 and further updated that doctrine in 2000, 2010, and 2014. Proponents of the "escalate to de-escalate" theory submit that Russian military doctrine provides the Russian Federation with a first-use nuclear option to create conditions for negotiations favorable to Russia.²⁸ In contrast, some analysts believe that Russian military doctrine between 1993 and 2014 restricted the use of nuclear weapons and more recently raised the threshold for their use.²⁹ Further adding to the debate are statements from Russian officials regarding the role of nuclear weapons during conflicts. Substantial evidence exists to support the thesis that Russia possessed an "escalate to de-escalate" strategy during the early 2000s, and there are adequate grounds for the argument that Russia was hesitant in adopting such a strategy and that Russian nuclear strategy evolved away from "escalate to de-escalate" through its 2010 and 2014 military doctrines. However, this research concludes that Russia maintains escalatory and operational roles for nuclear weapons.

This chapter aims to understand Russia's 2014 Military Doctrine from the relative perspective of the earlier versions published in 1993, 2000, and 2010 to identify the trend in Russian strategic nuclear thinking and the role nuclear forces fulfill in Russia's strategy. This chapter further considers statements made by Russian officials on nuclear weapons

²⁸ Sokov, "Why Russia Calls a Limited Nuclear Strike 'De-Escalation."

²⁹ Bruusgaard, "The Myth of Russia's Lowered Nuclear Threshold."

and their believed role in Russian strategy to determine if an inconsistency exists between those statements and officially published Russian documents. Finally, a comparison is made between Russia's 2014 Military Doctrine and the declaratory nuclear policies of the United States and China to determine if Russia's nuclear intentions align with those of potential nuclear adversaries.

B. EVOLUTION OF RUSSIAN NUCLEAR DOCTRINE

Russia's 1993 Military Doctrine was the first military doctrine published by the Russian Federation and was distinctly unique from the Soviet approach to military-political thinking in that the former U.S.S.R. did not possess a published doctrine. The 1993 Military Doctrine did not include a no first-use policy for nuclear weapons and, while catching the attention of some analysts, did not generate much concern among Westerners.³⁰ According to the Basic Provisions of the Military Doctrine of the Russian Federation, approved on November 2, 1993:

The aim of the Russian Federation's policy in the sphere of nuclear weapons is to eliminate the danger of nuclear war by deterring the launching of aggression against the Russian Federation and its allies. The Russian Federation: will not employ its nuclear weapons against any state-party to the Treaty on the Nonproliferation of Nuclear Weapons, dated I July 1968, which does not possess nuclear weapons except in the cases of: a) an armed attack against the Russian Federation, its territory, Armed Forces, other troops, or its allies by any state which is connected by an alliance agreement with a state that does possess nuclear weapons; b) joint actions by such a state with a state possessing nuclear weapons in the carrying out or in support of any invasion or armed attack upon the Russian Federation, its territory, Armed Forces, other troops, or its allies; actively advocates the cessation of nuclear weapons tests and promotes the establishment of dialogue on this question with the ultimate goal of achieving a comprehensive ban; seeks the reduction of nuclear forces to a minimal level which would guarantee the prevention of large-scale war and the maintenance of strategic stability and -- in the future -- the complete elimination of nuclear weapons; takes, jointly with other interested

³⁰ James Holcomb et al., *Russia's New Doctrine: Two Views*, (Carlisle, PA: Strategic Studies Institute, 1994), https://ssi.armywarcollege.edu/pubs/display.cfm?pubID=174.

countries, the requisite measures to strengthen the regime governing the nonproliferation of nuclear weapons and render it universal in nature.³¹

Though this language does not specifically state a reserved right for the first-use of nuclear weapons, it does not exclude the idea from its doctrine. Despite the inclusion of restrictions on the use of nuclear weapons, this was seen by some analysts as an offensive document and set the conditions for the current debate surrounding Russia's nuclear intentions.³²

The 1993 Military Doctrine reveals three concerning key points regarding Russian military thought: (1) local wars can escalate to large-scale wars; (2) conventional attacks on Russian strategic nuclear forces (or their corresponding supportive infrastructure and control systems) increase the likelihood of escalating to nuclear war; (3) the use of nuclear weapons, however limited, may lead to a large exchange of nuclear weapons with disastrous effects.³³ Military experts from any global power would recognize the potential of local conflicts escalating to regional wars and the Russian Federation's acknowledgement that limited nuclear use increase the chances of large nuclear exchanges seemingly indicate a non-escalatory approach to nuclear weapons. However, the Russian Federation's clause that conventional attacks on Russian nuclear forces increase the likelihood of nuclear conflict is concerning and a theme consistent with subsequent versions of Russian military doctrine. Nikolai Sokov, a noted scholar of Russian strategy and former member of both the Soviet Union and Russian Federation's Ministry of Foreign Affairs, submits that the language used to address nuclear weapons was intended for conditions of a global war that threatened the sovereignty of the Russian Federation.³⁴ Sokov's assessment appears consistent with language that appears in the 1993 Military Doctrine in that the Russian Federation defined the role of nuclear weapons under the

³¹ "Basic Provisions of the Military Doctrine of the Russian Federation," Federation of American Scientists, November 2, 1993, https://fas.org/nuke/guide/russia/doctrine/russia-mil-doc.html.

³² Holcomb et al., Russia's New Doctrine: Two Views.

³³ Federation of American Scientists, "Basic Provisions of the Military Doctrine of the Russian Federation."

³⁴ Nikolai Sokov, "Russia's 2000 Military Doctrine," Nuclear Threat Initiative, October 1, 1999, https://www.nti.org/analysis/articles/russias-2000-military-doctrine/.

pretense that the Russian Federation did not view any state as an enemy and "seeks the reduction of nuclear forces to a minimal level which would guarantee the prevention of large-scale war and the maintenance of strategic stability and—in the future—the complete elimination of nuclear weapons" and views world war (conventional and nuclear) as unlikely in future conflicts.³⁵ This language is not surprising given the promising relationship between the new Russian Federation and the United States following the end of the Cold War. Sokov, however, suggests that the 1993 Military Doctrine essentially illustrates a shift to a deterrence model that threatens global nuclear war by way of any conflict with Russia.³⁶ In either case, the 1993 Military Doctrine demonstrated an emphasis on nuclear weapons to maintain state security through the threat of nuclear escalation.

C. RUSSIA'S 2000 MILITARY DOCTRINE

Russia's 2000 Military Doctrine contained subtle changes from the 1993 version. Although subtle, these changes provide key insight to evolving Russian strategic thought. Like its 1993 predecessor, the 2000 doctrine does not contain a no first-use clause—a theme consistent with Russian military doctrines since 1993. More importantly, however, is the fact that the role of nuclear weapons is expanded. Sokov notes that nuclear weapons under the 2000 Military Doctrine is assigned the additional purpose of "ensuring military security" and "maintaining international stability and peace." The 2000 Military Doctrine also states "Safeguarding the Russian Federation's military security is the most important area of the state's activity." Further, the 2000 Military Doctrine states that the Russian Federation "reserves the right to use nuclear weapons in response to the use of nuclear and other types of weapons of mass destruction against it and (or) its allies, as well

³⁵ Federation of American Scientists, "Basic Provisions of the Military Doctrine of the Russian Federation."

³⁶ Sokov, "Russia's 2000 Military Doctrine."

³⁷ Sokov, "Russia's 2000 Military Doctrine."

³⁸ "Russian Federation Military Doctrine," Arms Control Association, April 22, 2000, https://www.armscontrol.org/act/2000 05/dc3ma00.

as in response to large-scale aggression utilizing conventional weapons in situations critical to the national security of the Russian Federation."³⁹

The expanded role for nuclear weapons in the 2000 Military Doctrine indicates the Russian Federation adopted an "escalate to de-escalate" strategy. The 2000 Military Doctrine expanded on Russia's classification of conflicts to include: (1) armed conflicts; (2) local wars; (3) regional wars; (4) global (large-scale) war. 40 Compared to the 1993 Military Doctrine, the 2000 Military Doctrine broadens the potential use of nuclear weapons to regional wars.⁴¹ Russia's 2000 Military Doctrine defines the parameters of local, regional, and large-scale wars and implies that the level of war in conjunction with the political objectives of adversaries, coupled with the means of achieving those objectives, dictate Russia's response.⁴² In this case, the 2000 Military Doctrine both elaborates and expands on the 1993 doctrine in the following way: an armed conflict or local war may escalate into a regional war which in turn sets the conditions for the use of nuclear weapons. The 2000 Military Doctrine goes on further to state "A large-scale war utilizing only conventional weapons will be characterized by the high likelihood of escalating into nuclear war."43 The expanded purpose of nuclear weapons and Russia's clear linkage between conventional attacks and nuclear response strongly support the idea of an escalatory strategy.

The contrast between the 2000 Military Doctrine and Russia's 2000 National Security Concept published by the Ministry of Foreign Affairs of the Russian Federation further illustrates an escalatory nuclear strategy. While the 2000 Military Doctrine states the role of nuclear weapons is deterring aggression, protecting military security, and maintaining stability, the 2000 National Security Concept of the Russian Federation states

³⁹ Arms Control Association, "Russian Federation Military Doctrine."

⁴⁰ Sokov, "Russia's 2000 Military Doctrine."

⁴¹ Arms Control Association, "Russian Federation Military Doctrine."

⁴² Arms Control Association, "Russian Federation Military Doctrine."

⁴³ Arms Control Association, "Russian Federation Military Doctrine."

that the role of Russian deterrence is to prevent aggression on any scale.⁴⁴ The 2000 National Security Concept essentially bridges the gap between the regional role for nuclear weapons and local wars through the prevention of conflicts at all levels.

Further, Russia's 2000 Military Doctrine maintains language consistent with the 1993 Military Doctrine in terms of escalation control and implies an escalatory strategy. Sokov notes that both the 1993 and 2000 military doctrines referenced Russia's nuclear ability to inflict "predetermined damage" versus "unacceptable damage" and submits that Russia adopted a limited-use policy consistent with an "escalate to de-escalate" strategy. 45 The introduction of "predetermined damage" indicates that nuclear weapons are associated with a planned level of damage and supports the notion of an "escalate to de-escalate" strategy. This hypothesis is supported by Russia's 2000 National Security Concept that states Russia must possess nuclear capabilities to inflict "the desired extent of damage...in any conditions or circumstances."46 However, a following clause in the 2000 Military Doctrine indicates that nuclear weapons are not intended for immediate use with a conventionally superior adversary during a large-scale war. The 2000 Military Doctrine predicts the sequence of a large-scale war in that it will have "an initial period, the main component of which is an intense armed struggle to gain strategic initiative, preserve stable state and military command and control, achieve supremacy in the information sphere, and win (maintain) air superiority."47 This clause elaborates to state "In the event of a prolonged large-scale (regional) war its goals will be achieved in the subsequent and final periods."48 While the 2000 Military Doctrine assigns nuclear weapons to the role of protecting its vital military security, this clause appears to indicate that Russia may use nuclear weapons if it fails to achieve strategic success over a period of time that threatens

^{44 &}quot;National Security Concept of the Russian Federation," The Ministry of Foreign Affairs of the Russian Federation, January 10, 2000, http://www.mid.ru/en/foreign_policy/official_documents/-/asset_publisher/CptICkB6BZ29/content/id/589768.

⁴⁵ Sokov, "Russia's 2000 Military Doctrine."

⁴⁶ The Ministry of Foreign Affairs of the Russian Federation, "National Security Concept of the Russian Federation."

⁴⁷ Arms Control Association, "Russian Federation Military Doctrine."

⁴⁸ Arms Control Association, "Russian Federation Military Doctrine."

its military security and, therefore, its national security. The language in Russia's 2000 Military Doctrine supports an "escalate to de-escalate" strategy but does not necessarily indicate that nuclear weapons are Russia's immediate option during a conflict.

D. RUSSIA'S 2010 MILITARY DOCTRINE

For the first time since its 1993 Military Doctrine, Russia's 2010 Military Doctrine indicates a solidified thinking behind the messaged role of nuclear weapons. The 1993 Military Doctrine and, to a greater extent, the 2000 Military Doctrine placed emphasis on providing security during a period of transition for the Russian Federation; the 2010 Military Doctrine only indicates that the application of Russian military doctrine may be adjusted for specific strategic planning.⁴⁹ As did the 2000 Military Doctrine, the 2010 Military Doctrine recognizes the evolving nature of warfare towards precision capabilities and increased use of technologically advanced weapon systems and enablers. In light of this, the 2010 Military Doctrine states "Nuclear weapons will remain an important factor for preventing the outbreak of nuclear military conflicts and military conflicts involving the use of conventional means of attack (a large-scale or regional war)" and further states that a military conflict at the regional or large-scale level with conventional weapons that threatens the existence of the state may lead to nuclear conflict.⁵⁰ Although the 2010 Military Doctrine retained the expanded role of nuclear weapons for both large-scale and regional war, the 2010 Military Doctrine appears to have limited the use of nuclear weapons to some degree in that it indicated the existence of the state must be threatened as a prerequisite for nuclear conflict.

The statement of reserved right to use nuclear weapons did, however, change between 2000 and 2010. According to the 2010 Military Doctrine, "The Russian Federation reserves the right to utilize nuclear weapons in response to the utilization of nuclear and other types of weapons of mass destruction against it and (or) its allies, and also in the

⁴⁹ "The Military Doctrine of the Russian Federation [2010]," Carnegie Endowment for International Peace, February 5, 2010, https://carnegieendowment.org/files/2010russia_military_doctrine.pdf; "Russian Federation Military Doctrine," Russian Federation.

⁵⁰ Carnegie Endowment for International Peace, "The Military Doctrine of the Russian Federation [2010]."

event of aggression against the Russian Federation involving the use of conventional weapons when the very existence of the state is under threat."⁵¹ Whereas the 2000 Military Doctrine reserved the right to use nuclear weapons in "situations critical to the national security of the Russian Federation," the 2010 doctrine seemingly narrows the threshold. ⁵² The 2010 doctrine retained language similar the 1993 and 2000 versions in that the doctrine focuses on maintaining nuclear forces, along with its supportive systems and infrastructure, "at a level guaranteeing the infliction of the required damage on the aggressor."⁵³ Russia's 2010 Military Doctrine exhibits legacy tendencies toward an "escalate to de-escalate" strategy but seemingly narrows the conditions under which the limited or non-limited use of nuclear weapons is considered.

E. CURRENT RUSSIAN NUCLEAR DOCTRINE

Russia's 2014 Military Doctrine is the result of 19 years of evolved Russian military-political thinking. The 2014 Military Doctrine of the Russian Federation, approved by Vladimir Putin on December 25, 2014, nearly mirrors the language on nuclear weapons of the 2010 version. The reserved right to use nuclear weapons did not change significantly from 2010 to 2014. The 2014 Military Doctrine states:

The Russian Federation shall reserve the right to use nuclear weapons in response to the use of nuclear and other types of weapons of mass destruction against it and/or its allies, as well as in the event of aggression against the Russian Federation with the use of conventional weapons when the very existence of the state is in jeopardy.⁵⁴

Much of the language on nuclear weapons contained in Russia's 2014 Military Doctrine is comparable to that of the 2010 version with the exception of one of the main

⁵¹ Carnegie Endowment for International Peace, "The Military Doctrine of the Russian Federation [2010]."

⁵² Carnegie Endowment for International Peace, "The Military Doctrine of the Russian Federation [2010]."

⁵³ Carnegie Endowment for International Peace, "The Military Doctrine of the Russian Federation [2010]."

⁵⁴ "The Military Doctrine of the Russian Federation [2014]," The Embassy of the Russian Federation to the United Kingdom of Great Britain and Northern Ireland, December 25, 2014, https://rusemb.org.uk/press/2029.

tasks of the armed forces. In contrast to the 2010 Military Doctrine, which advocated for a nuclear preparedness to inflict the "required damage" on an aggressor, the 2014 Military Doctrine differs slightly in that nuclear forces inflict "unacceptable damage" on an aggressor. 55 Whereas "required" damage associates the concepts of "deterrent," "dosed," or "assigned" levels of damage and are associated with the concept of "de-escalation," "unacceptable" damage traditionally implied a "guaranteed destruction" associated more with the concept of debilitating strategic damage of an adversary's population and industrial capabilities.⁵⁶ One could argue that Russia's use of the term "unacceptable damage" seemingly shifts away from the idea of escalation control associated with an "escalate to de-escalate" nuclear strategy and implies a deterrence nature. However, Johnson notes a shift in Russian strategic thinking and submits that the term "unacceptable damage" has recently been defined as "damage of a scale that would place in doubt the achievement of the aims of the armed conflict, but would not deprive the adversary of the alternatives for de-escalation."57 A deeper review of this definition suggests a merger between an "escalate to de-escalate" strategy with the idea of operationally applying nuclear weapons as a warfighting tool. In the case of the 2014 Military Doctrine, Russia retains the right for first-use and suggestively applies an operational role to nuclear weapons.

F. RUSSIAN STATE POLICY ON NAVAL OPERATIONS

Russia's publication of the Fundamentals of the State Policy of the Russian Federation in the Field of Naval Operations for the Period Until 2030 (State Policy on

⁵⁵ The Embassy of the Russian Federation to the United Kingdom of Great Britain and Northern Ireland, "The Military Doctrine of the Russian Federation [2014]."

⁵⁶ Dave Johnson, Russia's Conventional Precision Strike Capabilities, Regional Crises, and Nuclear Thresholds, Report No. 3 (Livermore, CA: Lawrence Livermore National Laboratory, 2018), 39–40, https://cgsr.llnl.gov/content/assets/docs/Precision-Strike-Capabilities-report-v3-7.pdf; Refer to Alain Enthoven and K. Wayne Smith, How Much is Enough? Shaping the Defense Program 1961–1969 (New York: Harper and Row, 1971), 175. Johnson associates "unacceptable" damage with the McNamara criteria which concluded the level of damage involves the destruction of 20 to 25 percent of and adversary's population and destruction of 50 percent of its industrial capacity.

⁵⁷ V. I. Polegaev, V. V. Alferov, O Neyadernom Sderzhivanii, Ego Roli I Meste v Sisteme Strategicheskogo Sderzhivaniya, Voennaya Mysl', No. 7, July 2015, p. 6, quoted in Johnson, *Russia's Conventional Precision Strike Capabilities, Regional Crises, and Nuclear Thresholds*, 40.

Naval Operations) appears far less ambiguous as to the role of nuclear weapons when compared to Russia's 2014 Military Doctrine. Russia's State Policy on Naval Operations highlights four key points: (1) Russia believes it is possible to "escalate to de-escalate" in terms of the use of nuclear weapons; (2) Russia currently views nonstrategic nuclear weapons as an operational warfighting tool; (3) Russia retains the above roles for nuclear weapons into the foreseeable future despite an increasingly capable conventional military and development of precision technology comparable to Western militaries; (4) the policy is a "decree by the President of the Russian Federation" who is the approval authority for the use of nuclear weapons.⁵⁸

Russia's State Policy on Naval Operations assigns nonstrategic nuclear weapons a role in strategic deterrence and implies an "escalate to de-escalate" strategy. According to the policy, "during the escalation of military conflict, demonstration of readiness and determination to employ non-strategic nuclear weapons capabilities is an effective deterrent." Russia associates escalatory actions with the concept of deterrence and clearly demonstrates the belief that nonstrategic nuclear weapons may be used to politically coerce adversaries.

Russia's State Policy on Naval Operations further assigns nonstrategic nuclear weapons an operational role in warfighting and one that is conducive to Johnson's interpretation of "unacceptable damage." Russia's State Policy on Naval Operations states that an indicator of naval effectiveness is its navy's ability to "damage an enemy's fleet at a level not lower than critical with the use of non-strategic nuclear weapons." Some may argue that the Russian Navy's ability to render an adversarial fleet combat

⁵⁸ President of the Russian Federation, *Fundamentals of the State Policy of the Russian Federation in the Field of Naval Operations*, No. 327, trans. Ana Davis (Moscow: the Kremlin, 2017), https://dnnlgwick.blob.core.windows.net/portals/0/NWCDepartments/Russia%20Maritime%20Studies%20 Institute/RMSI_RusNavyFundamentalsENG_FINAL%20(1).pdf?sr=b&si=DNNFileManagerPolicy&sig=fj FDEgWhpd1ING%2FnmGQXqaH5%2FDEujDU76EnksAB%2B1A0%3D.

⁵⁹ President of the Russian Federation, Fundamentals of the State Policy of the Russian Federation in the Field of Naval Operations.

⁶⁰ Johnson, Russia's Conventional Precision Strike Capabilities, Regional Crises, and Nuclear Thresholds, 40.

⁶¹ President of the Russian Federation, Fundamentals of the State Policy of the Russian Federation in the Field of Naval Operations.

ineffective could simply be a first-use, "escalate to de-escalate" measure. However, as Russian military doctrine understands that conflict may be prolonged, it is difficult to imagine that Russian naval forces would not continue the use of nonstrategic nuclear weapons to maintain maritime superiority.

Lastly, the State Policy on Naval Operations is intended to project the roles and responsibilities of Russia's Navy through the year 2030. Despite Russian advances in conventional precision capabilities over the years (this is discussed in chapter 3), Russia maintains a reliance on nonstrategic nuclear weapons. This policy addresses the integration of conventional precision weapons into naval strategy but nonetheless assigns escalatory and operational roles to nuclear weapons well into the next decade.

G. THE CURRENT DEBATE IN THE UNITED STATES

While Russia's 1993 Military Doctrine aroused concern among some western analysts, the 2000 Military Doctrine seemingly codified the idea of an escalatory nuclear strategy and served as the catalyst for Dr. Nikolai Sokov's influential article "Why Russia Calls a Limited Nuclear Strike 'De-escalation'" for the *Bulletin of the Atomic Scientists*. 62 The 2018 Nuclear Posture Review (NPR) is the first NPR to suggest that Russia adopted an "escalate to de-escalate" policy despite the fact that doctrinal language in Russian military doctrine that supports such a policy dates back to 1993. 63 The 2018 NPR and Russia's recent activities somewhat revived the fears and speculations of the Cold War past. To illustrate this point, some analysts preface their assessment of Russia's doctrine with similarities between the Soviet Union and the current Russian Federation. Dr. Schneider, a senior analyst for the National Institute of Public Policy, states Russia's current nuclear strategy is based on that of its Soviet predecessor and points out Russia considers the United States and NATO as its primary enemies. 64 In 2006, Schneider referenced declassified Soviet documents that indicate the Soviet Union possessed plans for the first-use of nuclear weapons in a conventional war against the United States/NATO

⁶² Sokov, "Why Russia Calls a Limited Nuclear Strike 'De-Escalation."

⁶³ Department of Defense, Nuclear Posture Review, 30.

⁶⁴ Schneider, "Escalate to De-escalate."

and cited Russian's 2000 Military Doctrine to support his claim that the Russian Federation reserves the right to use nuclear weapons during a conventional war.65 However, the doctrinal language that supports an escalation strategy emerged in Russia's 1993 Military Doctrine immediately following the collapse of the Soviet Union and makes no reference to the United States or NATO as threats.⁶⁶ Moreover, Russia's 2000 Military Doctrine fails to name the U.S. or NATO as threats; NATO's use of military force in vicinity of Russia without the authorization of the United Nations Council is only mentioned in Russia's 2000 National Security Concept published prior to the 2000 Military Doctrine as "fraught with the danger of destabilizing the entire strategic situation in the world." The Russian Federation first introduced NATO activities near Russia as a threat in its 2010 Military Doctrine approved in February of 2010. Strangely, the United States' 2010 NPR, published in April of 2010, emphasized that the U.S. and Russia were no longer adversaries and that the potential for conflict "declined dramatically." This suggests a significant delay by Western analysts to accurately reconcile Russian and Western perspectives perhaps due to a refusal of U.S. analysts to acknowledge that Russian political interests did not align with U.S. post-Cold War expectations.

The 2018 NPR asserts its belief that statements from Russia and its nuclear doctrine may have lowered its nuclear threshold for conflicts—notably with the possible use of nonstrategic nuclear weapons.⁶⁹ This belief is susceptible to question when compared to the evolution of Russian military doctrine. Kristin Bruusgaard, a Stanton Nuclear Security Fellow at CISAC, Stanford University, suggests that analysts fail to consider the evolution

⁶⁵ Schneider, "Escalate to De-escalate."

⁶⁶ Federation of American Scientists, "Basic Provisions of the Military Doctrine of the Russian Federation."

^{67 &}quot;National Security Concept of the Russian Federation," Russian Federation, January 10, 2000, http://www.mid.ru/en/foreign_policy/official_documents/-/asset_publisher/CptICkB6BZ29/content/id/589768.

⁶⁸ Department of Defense, *Nuclear Posture Review*, (Washington, DC: Office of the Secretary of Defense, 2010), iv, https://dod.defense.gov/Portals/1/features/defenseReviews/NPR/2010_Nuclear_Posture_Review_Report.pd f

⁶⁹ Department of Defense, Nuclear Posture Review [2018], xi-xii.

of Russia's military doctrine and focus on "outdated elements of Russian strategy."⁷⁰ Bruusgaard agrees that the language contained in Russia's 2000 Military Doctrine suggests a lowered nuclear threshold but submits the recently restrictive role of nuclear weapons most likely coincides with Russia's increased confidence in conventional weapons and raises the nuclear threshold.⁷¹ This theory is easily supported by two points: (1) Russia's 1993 and 2000 military doctrines explicitly state that they were intended to serve Russia's security interests during its transition from the Soviet Union to the Russian Federation; (2) the 2014 Military Doctrine introduces the idea of non-nuclear strategic deterrence.

Russia's increased conventional and asymmetrical capabilities contribute to Russia's evolving nuclear strategy. Russia's conventional military weaknesses caused by the abrupt fall of the Soviet Union appear to have resulted in plans for the broadened use of nuclear weapons as the 1993 and 2000 military doctrines stressed improving Russia's conventional forces. Russia's 2014 Military Doctrine seems to reflect more confidence in Russia's non-nuclear deterrence while restricting the use of nuclear weapons. Further, the 2014 Military Doctrine expands on the nature of future conflicts as involving precision munitions, electronic warfare, autonomous vehicles, and capabilities that support conventional weapons that define Westerners' understanding of hybrid warfare. In 2014, Russia demonstrated its ability to successfully capitalize from special operations and information warfare capabilities during its invasion of Crimea. Russia's ability to improve conventional and asymmetric strategic capabilities indicate a lesser reliance on nuclear weapons to achieve strategic objectives. According to Sokov, Russia's transition away from an escalatory strategy began with its 2010 Military Doctrine. Sokov suggests Russia retains doctrinal language for the limited use of nuclear weapons but does so as a

⁷⁰ Bruusgaard, "The Myth of Russia's Lowered Nuclear Threshold."

⁷¹ Bruusgaard, "The Myth of Russia's Lowered Nuclear Threshold."

⁷² The Embassy of the Russian Federation to the United Kingdom of Great Britain and Northern Ireland, "The Military Doctrine of the Russian Federation [2014]."

⁷³ The Embassy of the Russian Federation to the United Kingdom of Great Britain and Northern Ireland, "The Military Doctrine of the Russian Federation [2014]."

⁷⁴ Nikolai Sokov, "The Role of Nuclear and Advanced Conventional Weapons in Russian Containment Strategy" (lecture, Naval Postgraduate School, Monterey, CA, April 26, 2019).

back-up option until conventional forces are further modernized.⁷⁵ Sokov's assessment is consistent with language in the 2000 Military Doctrine that associates large-scale wars with the increased likelihood of nuclear conflict but acknowledges the possibility of prolonged conflicts.⁷⁶

While the more hawkish analysts suggest that Russia possesses an escalatory policy, others submit that Russia simply recognizes Western concerns and continues to capitalize from the West's difficulty in reading Russian intentions. This perception of Russian thought is not new. George Kennan's assessments of the Soviet Union as opportunistic of situations and messaging are well known among scholars of Russian-Western relations. Olga Oliker, the Senior Advisor and Director of the Russia and Eurasia Program at the Center for Strategic and International Studies, suggests that Russia is exercising a "policy of deliberate ambiguity." Colby, who suggests Russia possesses an escalatory strategy, also agrees that Russian military doctrine is ambiguous and is such by design. According to Oliker, ambiguity does not necessarily equate to an escalatory strategy and that Russian officials only exercised escalatory rhetoric after Western analysts demonstrated concerns over Russian Iskander missiles capabilities. Oliker further notes that Russian officials' statements aim to deter adversaries through the assumption of worst-case scenarios. This argument is valid in that some analysts of Russian nuclear strategy often support their belief in Russia's alleged escalatory strategy with hypothetical

⁷⁵ Sokov, "The Role of Nuclear and Advanced Conventional Weapons in Russian Containment Strategy."

⁷⁶ Arms Control Association, "Russian Federation Military Doctrine."

⁷⁷ George Kennan, "The Sources of Soviet Conduct," *Foreign Affairs* 65, no. 4 (Spring, 1987): 862. JSTOR; George Kennan, "The Long Telegram," February 22, 1946, https://digitalarchive.wilsoncenter.org/document/116178.pdf.

⁷⁸ Oliker, "Moscow's Nuclear Enigma."

⁷⁹ Colby, Russia's Evolving Nuclear Doctrine and its Implications.

⁸⁰ Oliker, "Moscow's Nuclear Enigma."

⁸¹ Oliker, "Moscow's Nuclear Enigma."

scenarios.⁸² The hypothetical scenarios presented by these analysts are not unrealistic in the conditions surrounding potential conflict between Russia and the West but Oliker sharply points out that Russia's most recent military doctrine clearly defines the two conditions which may prompt a Russian nuclear response: (1) an attack on Russia using weapons of mass destruction; (2) overwhelming conventional forces that threaten the existence of Russia.⁸³

The ambiguity behind Russia's choice of doctrinal language may be the result of on-going internal debates regarding the role of nuclear weapons in Russian strategy. Shoumikhin's assessment of Russian military doctrine after its 2010 publication posits that the continued debate between political elites with consideration to Russia's military assessments may lead Russia to develop doctrinal language that appears at ease with the West, is agreeable with the people of Russia, but does not necessarily limit decision-makers in the use of nuclear weapons—a tactic Shoumikhin illustrates is consistent with behavior from the former Soviet Union.⁸⁴ Analysts who believe Russia possesses an escalatory strategy may point to this as further evidence, but under Shoumikhin's assessment this tactic is mainly focused on converting doctrinal language to diplomatic leverage.⁸⁵ The lack of a clear nuclear strategy provides the Russian Federation with domestically acceptable and superficial policies that confuse the West and allow diplomatic freedom of maneuver but ultimately hold the door open for the use of nuclear weapons during a conflict.

⁸² Elbridge Colby, *Countering Russian Nuclear Strategy in Central Europe*, (Washington, DC: Center for New American Security, 2015), https://www.cnas.org/publications/commentary/countering-russian-nuclear-strategy-in-central-europe; Juri Luik and Tomas Jermalavicius, "A Plausible Scenario of Nuclear War in Europe, and How to Deter it: A Perspective from Estonia," *Bulletin of the Atomic Scientists* 73, no. 4 (2017): 235, https://doi.org/10.1080/00963402.2017.1338014.

⁸³ Oliker, "Moscow's Nuclear Enigma."

⁸⁴ Andrei Shoumikhin, "Nuclear Weapons in Russian Strategy and Doctrine," in *Russian Nuclear Weapons: Past, Present, and Future*, ed. Stephen Blank (Carlisle, PA: Strategic Studies Institute, 2011), 99–100.

⁸⁵ Shoumikhin, "Nuclear Weapons in Russian Strategy and Doctrine," 137–138.

H. RUSSIAN STATEMENTS

Statements and announcements emerging from Russia sometimes appear contradictory to Russia's published military doctrine. In all fairness, some hype over Russia's nuclear intentions may be inadvertently influenced by media headlines that highlight Russia as making inflammatory and escalatory remarks to shape political relations with the West. Nonetheless, the internal debates surrounding Russia's evolving doctrine add to the difficulty in identifying Russian nuclear intentions.

Analysts often look at the arguments made by Russian officials prior to the publication of Russia's 2000 Military Doctrine as evidence of an escalatory nuclear strategy. Oliker and Baklitskiy reference a 1999 paper published in the Russian military journal Voennaia Mysl wherein Russian military officers and analysts advocated for the use of nuclear weapons during a conflict to persuade adversaries to cease aggression for fear of further escalation.⁸⁶ However, Oliker and Baklitskiy further illustrate that the provocative language in the 1999 paper does not appear in the 2000 Military Doctrine.⁸⁷ Sokov's assessment of Russia's 2010 Military Doctrine for the Strategic Studies Institute indicates further discrepancies between official statements and published doctrine. Sokov points out that the Russian Federation began discussing its 2010 Military Doctrine in 2007 and that the topic of nuclear weapons emerged as a point of contention that delayed the publication of that doctrine until 2010.⁸⁸ Sokov indicates that Secretary Council Secretary Nikolai Patrushev alluded that the 2010 doctrine may expand the role of nuclear weapons for use in local conflicts.⁸⁹ Patrushev's statements are clearly seen as inaccurate when viewed against the language in Russia's 2010 Military Doctrine. Weitz additionally notes the difference between the expected language of Russia's 2010 Military Doctrine and its

⁸⁶ Oliker and Baklitskiy, "The Nuclear Posture Review and Russian 'De-escalation:' A Dangerous Solution to a Nonexistent Problem."

⁸⁷ Oliker and Baklitskiy, "The Nuclear Posture Review and Russian 'De-escalation:' A Dangerous Solution to a Nonexistent Problem."

⁸⁸ Nikolai Sokov, "Nuclear Weapons in Russian National Security Strategy," in *Russian Nuclear Weapons: Past, Present, and Future*, ed. Stephen Blank (Carlisle, PA: Strategic Studies Institute, 2011), 209.

⁸⁹ Sokov, "Nuclear Weapons in Russian National Security Strategy," 209.

actual published content based on statements from Russian officials during the development of the 2010 Military Doctrine. According to Weitz, the head of the Russian General Staff and the First Deputy Defense Minister, General Yuri Baluyevsky, provided statements that advocated a more expansive role for nuclear weapons prior to the 2010 Military Doctrine. 90 Moreover, Weitz quotes Patrushev as stating "the conduct of a nuclear strike against an aggressor, including a preemptive strike, is not ruled out in critical situations for national security."91 More recently, Durkalec indicates that General Yuri Yakubov advocated for Russian officials to identify the conditions under which Russia would conduct a pre-emptive nuclear strike three months before the Russia published its 2014 Military Doctrine. 92 Dr. Mikhail Tsypkin, and expert on Russian military affairs and associate professor at the Naval Postgraduate School, points out that analysts, including Durkalec, mistakenly attribute greater influence to General Yakubov who indeed had no role in drafting Russia's 2014 Military Doctrine. 93 It is evident that at least some Russian officials wished to retain or expand the role of nuclear weapons in keeping with the trend between the 1993 and 2000 military doctrines. However, this is not proof of a retained escalatory nuclear strategy. The positions advocated by these Russian officials possibly demonstrate the same effects bureaucratic in-fighting in U.S. history made upon foreign relations. For instance, turmoil within President Reagan's administration during the 1980s between hard-liners and moderates resulted in mixed messages to the Soviet Union as to

⁹⁰ Richard Weitz, "Russian Tactical Nuclear Weapons: Current Policies and Future Trends," in *Russian Nuclear Weapons: Past, Present, and Future*, ed. Stephen Blank (Carlisle, PA: Strategic Studies Institute, 2011), 376.

⁹¹ Timofey Borisov, "Nikolay Patrushev: The Draft of the New Document, Which Defines the Country's Defense Capability, Has Been Prepared," *Rossiyskaya Gazeta*, November 20, 2009, quoted in Richard Weitz, "Russian Tactical Nuclear Weapons: Current Policies and Future Trends," in *Russian Nuclear Weapons: Past, Present, and Future*, ed. Stephen Blank (Carlisle, PA: Strategic Studies Institute, 2011), 377.

^{92 &}quot;Russian General Calls for Preemptive Nuclear Strike Doctrine against NATO," *The Moscow Times*, 3 September 2014, www.themoscowtimes.com/business/article/russian-general-calls-for-preemptive-nuclear-strikedoctrine-against-nato/506370.html quoted in Jack Durkalec. *Nuclear-Backed "Little Green Men:" Nuclear Messaging in the Ukraine Crisis*, (Warsaw: The Polish Institute of International Affairs, 2015), 8, https://www.stratcomcoe.org/jdurkalec-nuclear-backed-little-green-mennuclear-messaging-ukraine-crisis.

⁹³ Mikhail Tsypkin, personal communication, July 11, 2019.

U.S. intentions despite Reagan's overall goal to negotiate with the U.S.S.R.⁹⁴ It is important to note, however, that the strong opinions expressed by some Russian officials prior to the publication of a vague doctrine most likely remain with those officials and will most likely contribute to a more heated debate during an armed conflict.

Of particular concern, Russia's 2014 annexation of Crimea corresponded with an uptick in official statements that seemingly emphasized Russia's nuclear capabilities. Following remarks from Ukrainian officials on retaking Crimea, Russian Foreign Minister Sergei Lavrov strongly advised against military aggression in Crimea against Russia and reportedly stated "We have the doctrine of national security, and it very clearly regulates the actions, which will be taken in this case."95 This statement supports the idea of opportunistic messaging in that according to Lavrov, the doctrine is clear; as noted earlier, scholars on the subject tend to view Russia's military doctrine as less clear and not concrete. However, given the ambiguous nature of Russian doctrine, and this particular statement, it may be perceived as a nuclear threat by analysts who remain unsure how to classify this statement. Russian President Vladimir Putin is reported to have made a nuclear threat toward the U.S. following Crimea's annexation stating that additional sanctions would result in "discord between large nuclear powers." Further, Vladimir Putin stated he was prepared to place Russian nuclear forces on alert during the Crimea conflict.⁹⁷ While Putin did not explicitly threaten to use nuclear weapons, it is likely he understood his associating of Russia's nuclear power with current political friction with the United

⁹⁴ Hal Brands, *What is Good Grand Strategy: Power and Purpose in American Statecraft from Harry S. Truman to George W. Bush* (New York: Cornell University Press, 2014), 123.

⁹⁵ Zachary Keck, "Russia Threatens Nuclear Strike Over Crimea," *The Diplomat,* July 11, 2014, https://thediplomat.com/2014/07/russia-threatens-nuclear-strikes-over-crimea/; Dmitry Sudakov, "No One Should Even Try to Attack Crimea – Russian FM Lavrov," *Pravda.Ru*, September 7, 2014, http://www.pravdareport.com/russia/128011-attack_crimea_lavrov/.

⁹⁶ Tom Parfitt, "Vladimir Putin Issues New 'Large Nuclear Power' Warning to West," *The Telegraph*, October 16, 2014, https://www.telegraph.co.uk/news/worldnews/vladimir-putin/11167192/Vladimir-Putinissues-new-large-nuclear-power-warning-to-West.html.

⁹⁷ Thomas Grove, "Putin Says Russia Was Ready for Nuclear Confrontation Over Crimea," *Reuters*, March 25, 2015, https://www.reuters.com/article/us-russia-putin-yanukovichidUSKBN0MB0GV20150315.

States would be perceived as such. Putin's comments, given approximately one year after Crimea's annexation, supports the theory of opportunistic messaging.

Three years later, in 2018, Putin offered a different message to the United States. In a 2018 Presidential Address to the Federal Assembly, he emphasized the need for nuclear weapon and delivery system development in response to U.S. improvements in missile defense, quality of munitions, and accessibility of launch locations.⁹⁸ This is understandable in that Russia consistently demonstrates concern over U.S. missile defense capabilities and its impact on Russia's political and military standing in the international community. 99 Additionally, Putin discussed the progress of military programs specific to nuclear capabilities and precision delivery systems during this speech—presumably as a rally-around-the-flag political tactic to maintain funding and support for weapons development. 100 However, it appears that both U.S. military actions and Western concerns over Russia's alleged escalatory strategy resonated with Putin. Putin firmly and specifically referenced the United States' 2018 NPR, accused the U.S. of reducing the nuclear threshold, and strongly reiterated the criteria by which Russia reserves the right to employ nuclear weapons. 101 These statements suggest that Russia is aware of Western speculation over a supposed escalatory policy and is attempting to proactively address concerns. On the other hand, one could also argue that Putin is attempting to buy time to develop precision technology to deliver nuclear weapons, but this argument is not consistent with the increased emphasis on conventional capabilities in Russia's 2010 and 2014 military doctrines.

The existence of a classified annex to Russia's military doctrine adds an additional complexity to the debate on Russian nuclear strategy. Durkalec notes the internal debate on Russian nuclear strategy preceding the publication of Russia's military doctrine and suggests that Russia's classified annex to its nuclear strategy may include a hidden

⁹⁸ Vladimir Putin, Presidential Address to the Federal Assembly (Moscow: President of Russia. 2018).

⁹⁹ Mikhail Tsypkin, "Russian Politics, Policy-making and American Missile Defense" *International Affairs* 85, no. 4 (July 2009): 781–799, JSTOR.

¹⁰⁰ Putin, Presidential Address to the Federal Assembly.

¹⁰¹ Putin, Presidential Address to the Federal Assembly.

"escalate to de-escalate" strategy. 102 Regardless of what is secretly contained in the classified annex, the decision to use nuclear weapons rests with the president of Russia. 103 Shoumikhin acknowledges the internal debates among policy-makers but submits that Russian military doctrines are not used for propaganda purposes and are derived from classified components of Russia's military assessments. 104 This raises the question as to whether Russia's military doctrine conceals an escalatory strategy or attempts to clarify Russian nuclear intentions. Oliker and Bruusgaard both note the impracticality of publishing a declaratory policy that contradicts actual strategy as counterintuitive to nuclear deterrence. 105 Sokov offers an alternative meaning behind Russia's classified annex that is consistent with Shoumikihn's statement of doctrine comprised from classified annexes. According to Sokov, the classified annex to Russia's 2014 Military Doctrine does not provide clarification on when Russia will use nuclear weapons but rather lists predetermined targets established by Russia in the event of a conflict. 106 However, Tsypkin suggests that target lists are more likely found in operational plans 107—an idea consistent with other states that establish classified, pre-made contingency plans. Assuming that Russia's declared nuclear policy is based on classified assessments, the existence of classified annexes or operational plans by itself cannot not definitively indicate an "escalate to de-escalate" strategy.

I. U.S. NUCLEAR POLICY

The comparison of U.S. nuclear policy and Russia's military doctrine reveal striking similarities that may indicate that Russia's intentions are no different than other rational great powers. According to the 2018 NPR, the United States' stance is that "nuclear

¹⁰² Durkalec. Nuclear-Backed "Little Green Men:" Nuclear Messaging in the Ukraine Crisis, 8.

¹⁰³ The Embassy of the Russian Federation to the United Kingdom of Great Britain and Northern Ireland, "The Military Doctrine of the Russian Federation [2014]."

¹⁰⁴ Shoumikhin, "Nuclear Weapons in Russian Strategy and Doctrine," 99.

¹⁰⁵ Oliker, Russia's Nuclear Doctrine: What We Know, What We Don't Know, and What That Means; Bruusgaard, "The Myth of Russia's Lowered Nuclear Threshold."

¹⁰⁶ Sokov, "The Role of Nuclear and Advanced Conventional Weapons in Russian Containment Strategy."

¹⁰⁷ Mikhail Tsypkin, personal communication, July 11, 2019.

weapons have and will continue to play a critical role in deterring nuclear attack and in preventing large-scale conventional warfare." 108 This indicates that the U.S. and Russia view the role of nuclear weapons from a shared perspective in terms of preventing largescale conventional wars. Arguably, U.S. nuclear policy is less restrictive than Russia's 2014 Military Doctrine. Whereas Russia's 2010 and 2014 military doctrines indicate nuclear weapons are reserved for situations wherein Russia's existence is in jeopardy, the 2018 Nuclear Posture Review states that the U.S. considers the use of nuclear weapons in "extreme circumstances to defend the vital interests of the United States, its allies, and partners." 109 Some analysts suggest Russia's emphasis on nonstrategic nuclear weapons provides the foundation of Russia's alleged "escalate to de-escalate" policy. 110 However, language of escalation control is evident in the 2018 NPR as well. Under the condition of failed deterrence, "the United States will strive to end any conflict at the lowest level of damage possible and on the best achievable terms for the United States, allies, and partners. U.S. nuclear policy for decades has consistently included this objective of limiting damage."111 Although some may argue that the 2018 NPR is a response to both Russia's perceived escalatory nuclear strategy and Russia's recent acts of aggression, the 2018 NPR indicates that escalation control remained part of U.S. nuclear policy for quite some time prior to the United States' recent assessment of Russia.

Bruusgaard points out that Russia's conventional military capabilities remain comparatively inferior to those of the United States and, in the event of a conflict, Russia would exhaust its conventional options well before the United States. Bruusgaard suggests that this may set the conditions wherein Russia must rely on the nuclear option. 113

¹⁰⁸ Department of Defense, Nuclear Posture Review, iii.

¹⁰⁹ Department of Defense, Nuclear Posture Review, viii.

¹¹⁰ Sokov, "Why Russia Calls a Limited Nuclear Strike 'De-Escalation'"; Colby, *Countering Russian Nuclear Strategy in Central Europe*; Tsypkin, "Limited Nuclear Conflict and Escalation Control in Russian Military Strategy"; Department of Defense, *Proliferation: Threat and Response* (Washington, DC: Office of the Secretary of Defense, 2001), 53, https://fas.org/irp/threat/prolif00.pdf.

¹¹¹ Department of Defense, Nuclear Posture Review, viii.

¹¹² Bruusgaard, "The Myth of Russia's Lowered Nuclear Threshold."

¹¹³ Bruusgaard, "The Myth of Russia's Lowered Nuclear Threshold."

Although it is unlikely the United States can bring the full power-potential of its entire defense structure to the European theater instantaneously, this assessment appears consistent with the evolution of Russia's military doctrine and focus on a diverse array of non-nuclear and hybrid capabilities. In all fairness however, if the United States were faced with overwhelming conventional power from within its own hemisphere, it is difficult to imagine the United States would surrender its sovereignty before the use of nuclear weapons to maintain its existence.

J. CHINESE NUCLEAR POLICY

Chinese nuclear policy, in and by itself, may not directly influence Russia's current nuclear strategy. However, Chinese nuclear policy highlights the confidence embraced by Chinese policy-makers in their conventional military capabilities relative to Russia and its geo-political orientation relative to the United States. Kashin not only notes that Russia views China as a potential threat but also notes China as a conventional threat that currently cannot be defeated by Russia without the use of nuclear weapons. 114 This assessment of relative combat capabilities between Russia and China would force Russia's hand in operationalizing nuclear weapons to defeat a Chinese conventional attack. Further, China's geographical orientation makes a direct conflict between mainland China and the continental United States unlikely as both sides face extreme challenges in the deployment of ground troops on one another's territory. In both of these cases, China retains the luxury of a robust conventional military capable of defending its sovereignty which necessitates only a second-strike capability to deter initial conflict.

Chinese nuclear policy starkly contrasts the policies of Russia and the United States, but the influence of U.S. conventional technology may catalyze a change in Chinese nuclear doctrine as it is suspected to have done with Russia. The role of nuclear weapons in China differs greatly from that of Russia and the United States. Chinese nuclear strategy

¹¹⁴ Vassily Kashin, "The Sum Total of All Fears. The Chinese Threat Factor in Russian Politics," *Russia in Global Affairs*, April 15, 2013, https://eng.globalaffairs.ru/number/The-Sum-Total-of-All-Fears-15935.

is strictly based on deterrence as a "self-defensive nuclear strategy." China aims to maintain a small nuclear arsenal to ensure the state is capable of delivering a retaliatory nuclear strike only after a nuclear attack and vows not to become entangled in arms races with other states. He Further, Chinese doctrine is adamantly committed to a no first-use policy. However, Liping Xia of the School of Political Science and International Relations at Tongji University in Shanghai submits that China's nuclear strategy may evolve in response to U.S. precision munition capabilities. According to Xia, China my caveat its no first-use policy in response to the United States' Conventional Prompt Global Strike capability and refusal to adopt a no first-use agreement with the fear that the U.S. can deliver precision conventional weapons to destroy China's nuclear forces. Use Current Chinese nuclear doctrine does not align with Russian military doctrine but may evolve to mimic some language found in both U.S. and Russian nuclear strategy based on U.S. capabilities.

K. CONCLUSION

Current Russian military doctrine is based on a legacy of doctrines that were founded on an emphasis on nuclear weapons and not only supports an "escalate to deescalate" strategy but allows for the operational use of nonstrategic nuclear weapons. Russia's 1993 Military Doctrine marked a change in Russian strategic thought and omitted the no first-use declaration adopted by the former U.S.S.R. More concerning, the 1993 Military Doctrine links local wars with a potential escalation to the use of nuclear weapons. Russia's 2000 Military Doctrine expanded the role of nuclear weapons and displayed confrontational language compared to the 1993 version. Although the 2000 Military Doctrine expresses some restraint, it expands the role of nuclear weapons to protect the

^{115 &}quot;China's National Defense in 2006," Federation of American Scientists, December 29, 2006, http://fas.org/nuke/guide/china/doctrine/wp2006.html.

¹¹⁶ Federation of American Scientists, "China's National Defense in 2006."

¹¹⁷ Federation of American Scientists, "China's National Defense in 2006."

¹¹⁸ Liping Xia, "China's Nuclear Doctrine: Debates and Evolution," Carnegie Endowment for International Peace, June 30, 2016, https://carnegieendowment.org/2016/06/30/china-s-nuclear-doctrine-debates-and-evolution-pub-63967.

military and prevent aggression on any scale. Russia's 2000 Military Doctrine is best characterized as an "escalate to de-escalate" strategy but was clearly intended as a temporary solution to a newly formed Russian Federation comparatively lacking advanced military technologies.

Russia's 2010 and 2014 military doctrines appear to raise the threshold for the use of nuclear weapons and place greater emphasis on conventional deterrence and the hybrid warfare model. Despite this, official statements following the Crimea conflict suggest a Russia more willing to use nuclear weapons. In this sense, Russia currently exercises an "escalate to de-escalate" strategy in a communicative sense only as it is loosely backed up by the ambiguity of Russian doctrine. Colby intuitively submits that current Russian strategy focuses on restoring Russia's power and influence. 119 From this perspective, the Russian Federation may have adopted a Reagan-like approach of "coercive diplomacy." 120 Durkalec supports this thought and argues the Russian Federation assigns nuclear weapons the role of coercive diplomacy in Russia's ongoing dealings with Ukraine. 121 While Russia successfully continues its military efforts in Ukraine, it has yet to use a nuclear weapon to de-escalate the conflict. Unfortunately, Russia's State Policy on Naval Operations specifically assigns escalatory and operational roles to nonstrategic nuclear weapons under the blanket of a vague 2014 Military Doctrine published three years earlier.

Moreover, of the nuclear strategies expressed by the United States, Russia, and China, the U.S. and Russian nuclear doctrines are strikingly similar while China may eventually adopt similar doctrinal components. Neither the U.S. nor Russia pledge compliance with a no first-use policy while both states place emphasis on the role of nuclear weapons in maintaining strategic stability. This suggests that Russia attempts to maintain both military and doctrinal parity with the United States in the pursuit of its interests.

¹¹⁹ Colby, Russia's Evolving Nuclear Doctrine and its Implications.

¹²⁰ Brands, What is Good Grand Strategy: Power and Purpose in American Statecraft From Harry S. Truman to George W. Bush, 123.

¹²¹ Durkalec. Nuclear-Backed "Little Green Men:" Nuclear Messaging in the Ukraine Crisis, 19.

Russia's nuclear doctrine alone cannot answer the question surrounding Russia's nuclear intentions. The evolution of Russian military doctrine, at face value, indicates a shift from an "escalate to de-escalate" strategy but opens the possibility that Russia may still consider limited nuclear use on the battlefield in the face of an overwhelming conventional adversary. This question requires a review of Russia's nuclear capabilities, weapons development initiatives and exercises to determine exactly how Russia frames the role of nuclear weapons.

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III. CAPABILITIES AND DEVELOPMENT

Although Russia developed a capable conventional military that recognizes the importance of precision, long-range weapons, it places more emphasis on nuclear weapon modernization. Prussian associates the rise of Russian elements of national and military power since the fall of the Soviet Union with changes to Russian doctrine and suggests that current Russian diplomatic and military capabilities caused nuclear weapons to assume a "more normalized role in deterring large-scale aggression." However, Russia's continued maintenance of a comparatively large nonstrategic nuclear stockpile and increased development of dual-capable precision weapons ranged within the parameters of the INF Treaty indicate that Russia is focused on regional deterrence in Europe with the potential to transition to the use of nonstrategic nuclear weapons.

The collapse of the Soviet Union left the Russian military with a number of complex problem sets which resulted in a much weakened military force relative to the immense conventional power enjoyed by the U.S.S.R. and Warsaw Pact allies. Following the Cold War, Russia's military forces were greatly diminished, unconsolidated, and faced a multitude of personnel, infrastructure, and budget issues. ¹²⁴ Given this weakened state of military prowess and political uncertainty, it is understandable that the newly formed Russian Federation placed greater emphasis on the role of nuclear weapons to deter conflict as some analysists associate this condition with Russia's military doctrine. ¹²⁵ However, due to a series of reforms over the past thirty years, Russia's military has transformed into a capable, mobile, and well-rounded conventional force and has demonstrated the ability of "conducting the full range of modern warfare" along its periphery and in distance

¹²² Johnson, Russia's Conventional Precision Strike Capabilities, Regional Crises, and Nuclear Thresholds, 38–39.

¹²³ Bruusgaard, "The Myth of Russia's Lowered Nuclear Threshold."

¹²⁴ Defense Intelligence Agency, *Russia Military Power: Building a Military to Support Great Power Aspirations*, Report No. DIA-11-1704-161 (Washington, D.C.: Defense Intelligence Agency, 2017, 9–11, https://www.dia.mil/Portals/27/Documents/News/Military%20Power%20Publications/Russia%20Military%20Power%20Report%202017.pdf.

¹²⁵ McDermott, Russia's Conventional Military Weakness and Substrategic Nuclear Policy, 12.

locations like the Middle East. 126 Despite this, Russia continues to place emphasis on marrying modern precision weapon systems with nonstrategic nuclear capabilities.

A. BY THE NUMBERS

According to open-source information from the Bulletin of Atomic Scientists, current Russian and U.S. nuclear arsenals are comparable in terms of total number (including nonstrategic nuclear weapons in the total number). The nuclear arsenals of today bear no semblance to those accumulated by the United States and the former Soviet Union during the Cold War. The nuclear arsenals of Russia and the U.S. have been in steady decline following the end of the Cold War with total stockpiles for both states arriving at a plateau since the mid-2010s. 128 Kristensen and Norris conclude that Russia's current strategic stockpile consists of approximately 1600 nuclear warheads—roughly equal to the number of strategic nuclear weapons deployed by the United States. 129 Current data indicates that although both the U.S. and Russian nuclear arsenals hover around 4000, there is a disparity in nonstrategic nuclear weapons that leaves Russia with the numerical advantage—1830 to the United States' 500. 130

The 2018 NPR states that Russia is increasing its total number nonstrategic nuclear weapons within its arsenal. While the 2018 NPR's assessment may be based on classified information not available to this research, open-source data conflicts with the

¹²⁶ Defense Intelligence Agency, Russia Military Power: Building a Military to Support Great Power Aspirations, 13.

¹²⁷ Kristensen and Norris, "Russian Nuclear Forces, 2018," 185; Hans Kristensen and Robert Norris, "United States Nuclear Forces, 2018," *Bulletin of the Atomic Scientists* 74, no. 2, 120, https://doi.org/10.1080/00963402.2018.1438219.

¹²⁸ Robert Norris and Hans Kristensen, "Global Nuclear Weapons Inventories, 1945–2010," *Bulletin of the Atomic Scientists* 66, no. 4 (July/August 2010): 81–82, https://doi.org/10.2968/066004008; Max Roser and Mohamed Nagdy, "Nuclear Weapons, Empirical View" Our World in Data, accessed June 19, 2019, https://ourworldindata.org/nuclear-weapons#empirical-view.

¹²⁹ Hans Kristensen and Matt Korda, "Russian Nuclear Forces, 2019," *Bulletin of the Atomic Scientists* 75, no. 2 (March 2019), 73, https://doi.org/10.1080/00963402.2019/1580891; Hans Kristensen and Matt Korda, "United States Nuclear Forces, 2019," *Bulletin of the Atomic Scientists* 75, no. 3 (April 2019), 122, https://doi.org/10.1080/00963402.2019.1606503.

¹³⁰ Hans Kristensen and Matt Korda, "Russian Nuclear Forces, 2019," 73; Kristensen and Korda, "United States Nuclear Forces, 2019," 73.

¹³¹ Department of Defense, Nuclear Posture Review, 9.

NPR's conclusion. Based on analysis from the Bulletin of Atomic Scientists, Russia's nonstrategic nuclear weapon stockpile has decreased from 2016 to 2019 from approximately 2000 weapons to approximately 1830.¹³² According to this data, Russia has slightly decreased its overall stockpile of nuclear weapons since 2016 and transitioned some deployed strategic nuclear weapons to storage.¹³³ This data indicates that Russia maintains strategic nuclear parity with the United States, continues to maintain an advantage in the number of nonstrategic nuclear weapons, and has kept with the trend of steadily declining the number of weapons in its stockpile.

China, on the other hand, has slowly but steadily increased its nuclear arsenal each year since 1964 (at approximately 5 to 20 per year) and currently possesses roughly 280 nuclear weapons. ¹³⁴ The total number of nonstrategic nuclear weapon possessed by China, if any, remains unclear. The number of Chinese nonstrategic nuclear weapons was estimated at 150 in the 1994 Nuclear Weapons Databook. ¹³⁵ However, Ferguson, Mederios, and Saunders highlight conflicting and unconfirmed reports of Chinese nonstrategic nuclear weapons and implies that speculation drives many of the assessments regarding the Chinese nuclear arsenal. ¹³⁶ Open-source analysis offers only a presumptuous assessment of Chinese nonstrategic nuclear capabilities, suggests China possesses approximately 20 nonstrategic nuclear weapons, and does not indicate a desire

¹³² Kristensen and Korda, "Russian Nuclear Forces, 2019," 73; Kristensen and Norris, "Russian Nuclear Forces, 2018," 185; Hans Kristensen and Robert Norris, "Russian Nuclear Forces, 2017," *Bulletin of the Atomic Scientists* 73, no. 2 (February 2017), 115, https://doi.org/10.1080/00963402.2017.1290375; Hans Kristensen and Robert Norris, "Russian Nuclear Forces, 2016," *Bulletin of the Atomic Scientists* 72, no. 3 (April 2016), 125, https://doi.org/10.1080/00963402.2016.1170359.

¹³³ Kristensen and Korda, "Russian Nuclear Forces, 2019," *Bulletin of the Atomic Scientists*, 73; Kristensen and Norris, "Russian Nuclear Forces, 2018," 185; Kristensen and Norris, "Russian Nuclear Forces, 2017," 115; Kristensen and Norris, "Russian Nuclear Forces, 2016," 125.

¹³⁴ Hans Kristensen and Robert Norris, "Chinese Nuclear Forces, 2018," *Bulletin of the Atomic Scientists* 74, no. 4, (June 2018): 289, https://doi.org/10.1080/00963402/2018.1486620; Norris and Kristensen, "Global Nuclear Weapons Inventories, 1945–2010," 81–82; Roser and Nagdy, "Nuclear Weapons, Empirical View."

¹³⁵ Robert Norris, Andrew Burrows, and Richard Fieldhouse, *Nuclear Weapons Databook* (Boulder, CO: Westview Press, 1994), 324.

¹³⁶ Charles Ferguson, Evan Medeiros, and Phillip Saunders, "Chinese Tactical Nuclear Weapons," in *Tactical Nuclear Weapons: Emergent Threats in an Evolving Security Environment*, ed. Brian Alexander and Alistair Millar (Dulles, VA: Brassey's, 2003), 110–126.

by the Chinese to develop and deploy additional nonstrategic weapons. ¹³⁷ Regardless of China's nonstrategic nuclear capabilities, the relative size and lack of emphasis on sharply increasing its nuclear arsenal suggests China views nuclear weapons in accordance with a policy of minimal deterrence; this conclusion is in line with China's declared nuclear policy discussed earlier.

Western assessments often focus on Russia's nonstrategic nuclear capabilities as evidence of an escalatory nuclear strategy. Igor Sutyagin, an analyst for the United Kingdom's Royal United Services Institute, illustrates that Western fixation on the total number of nonstrategic nuclear weapons fails to provide analysts with an accurate picture of Russia's nonstrategic nuclear capabilities. 138 Assessments from Kristen and Korda delineate between the number of Russian deployed strategic nuclear weapons and the number of strategic and nonstrategic nuclear weapons that are stored. 139 The use of the term stored is deceiving in this case. According to Sutyagin, Russian nonstrategic nuclear weapons are assigned particular tasks and are stored at different stages of readiness (with the exception to naval forces which cannot quickly be fitted with nuclear weapons during a transition from peacetime to conflict). 140 Sutyagin states that Russian nonstrategic nuclear weapons are maintained in one of four states of readiness and fall within six categories: operationally assigned warheads, warheads assigned to temporarily unavailable platforms, strategic reserve, spares, refurbishment, and surplus. 141 Of these categories, only operationally assigned warheads and spares are kept at either full or near-readiness while surplus warheads or those undergoing refurbishment are transferred outside of military jurisdiction completely. 142 Furthermore, Sutyagin posits that Russian

¹³⁷ Kristensen and Norris, "Chinese Nuclear Forces, 2018," 293.

¹³⁸ Igor Sutyagin, *Atomic Accounting: A New Estimate of Russia's Non-Strategic Nuclear Forces*, (London, U.K.: Royal United Services Institute, 2012), 3, https://rusi.org/sites/default/files/201211 op atomic accounting.pdf.

¹³⁹ Kristensen and Korda, "Russian Nuclear Forces, 2019," 73.

¹⁴⁰ Sutyagin, Atomic Accounting: A New Estimate of Russia's Non-Strategic Nuclear Forces, 1–2, 10–12.

¹⁴¹ Sutyagin, Atomic Accounting: A New Estimate of Russia's Non-Strategic Nuclear Forces, 11.

¹⁴² Sutyagin, Atomic Accounting: A New Estimate of Russia's Non-Strategic Nuclear Forces, 11–12.

nonstrategic nuclear weapons are "inflexible" in their assignments and cannot be reallocated or resupplied easily. ¹⁴³ This indicates that the prolonged use of nonstrategic nuclear weapons on the battlefield is not envisioned by Russian military planners. Sutyagin concludes with an estimate based on historical warhead assignment data, delivery system capabilities, threat assessments, expected combat environments, and research/acquisitions, that Russia maintained approximately 1000 operationally assigned nonstrategic nuclear warheads as of 2012 (approximately one half of its total nonstrategic nuclear stockpile). ¹⁴⁴ Further, the estimated 1000 operationally assigned nonstrategic weapons are allocated among Russia's ballistic missile defense, air force, navy, and ground forces—with over one half of the assigned weapons allocated for Russia's air force and navy. ¹⁴⁵

One could argue that Russia's reduction in nonstrategic nuclear weapons is an indication of reduced reliance on the role of nuclear weapons in Russian strategy. However, Russia still possesses a numerical advantage of nonstrategic nuclear weapons nearly two-to-one compared with the U.S. Furthermore, Russia's capability in delivery systems for nonstrategic nuclear weapons advantages Russia—especially when compared to the small number of U.S. B-61 gravity bombs deployed in Europe. Additionally, Luzin submits that Russian decision-makers may feel more comfortable in the use of nonstrategic nuclear weapons in that a smaller Russian nonstrategic stockpile provides the illusion of greater control of escalation. The Defense Intelligence Agency (DIA) also takes note of the efforts placed by Russian military planners in the analysis of how many nuclear weapons are needed for particular tasks. Russia's comparatively larger nonstrategic nuclear stockpile, diverse options for precision delivery, and possible controlled use in predetermined damage assessments supports an escalatory Russian strategy.

¹⁴³ Sutyagin, Atomic Accounting: A New Estimate of Russia's Non-Strategic Nuclear Forces, 11.

¹⁴⁴ Sutyagin, Atomic Accounting: A New Estimate of Russia's Non-Strategic Nuclear Forces, 69, 76.

¹⁴⁵ Sutyagin, Atomic Accounting: A New Estimate of Russia's Non-Strategic Nuclear Forces, 73.

¹⁴⁶ Kristensen and Korda, "United States Nuclear Forces, 2019," 123.

¹⁴⁷ Pavel Luzon, "Russia's Tactical Nuclear Weapons: A Reality Check," Riddle, January 5, 2018, https://www.ridl.io/en/russias-tactical-nuclear-weapons-a-reality-check/.

¹⁴⁸ Defense Intelligence Agency, Russia Military Power: Building a Military to Support Great Power Aspirations, 31.

B. DUAL-CAPABLE SYSTEMS

Russia's increasing development of dual-capable delivery systems demonstrates an increased willingness to use nuclear weapons (or the threat thereof) during a conflict. The 2018 NPR states,

Russia possesses significant advantages in its nuclear weapons production capacity and in non-strategic nuclear forces over the U.S. and allies. It is also building a large, diverse, and modern set of non-strategic systems that are dual-capable (may be armed with nuclear or conventional weapons). 149

According to data from the Center for Strategic and International Studies, Russia currently possesses eighteen types of operational missiles (this does not include anti-air missile systems) while two additional types are in development. Of particular note, this data indicates that of the seven missiles that entered Russian service since 2007, five are dual-capable; the long-range Yars and Bulava strategic missiles in service since 2010 and 2013 (respectively) deliver only nuclear payloads. Further, Russia is developing a hypersonic glide vehicle capable of delivering nuclear or conventional payloads. Johnson acutely points out that current Russian precision-guided missiles provide Russia with usable and flexible options and "consist of redundant, overlapping, long-range, dual-capable missile coverage of nearly all of Europe from within Russian territory, airspace, and home waters." The development and deployment of increasingly efficient dual-capable weapons is intended to serve as a clear warning to Europe and provide Russia with greater flexibility in responding to threats.

¹⁴⁹ Department of Defense, *Nuclear Posture Review*, 9.

¹⁵⁰ Missile Defense Project, "Missiles of Russia," *Missile Threat*, Center for Strategic and International Studies, last modified June 15, 2018, https://missilethreat.csis.org/country/russia/.

¹⁵¹ Missile Defense Project, "Missiles of Russia."

¹⁵² Missile Defense Project, "Missiles of Russia."

¹⁵³ Johnson, Russia's Conventional Precision Strike Capabilities, Regional Crises, and Nuclear Thresholds, 39.

C. THE 9M729 AND THE INF TREATY

Russia's development and, more importantly, denial of ground-launched intermediate range weapons adds to the complexity of determining Russian strategy. Both the United States and NATO determined that Russia's recent development of the 9M729 ground-launched missile violates the 1987 Intermediate Range Nuclear Forces (INF) Treaty while Russia adamantly denies the violation. The development of the 9M729 raises two key questions: what is the purpose of intermediate range missiles in Russian strategy and why does Russia deny their existence?

A Congressional Research Service (CRS) report outlining the history of nuclear strategy during the Cold War leading to the INF Treaty may provide some insight. During the Cold War, the United States deployed intermediate range missiles in Europe to bolster its flexible response to the numerically superior conventional forces of the Soviet Union and Warsaw Pact members. Prior to the deployment of intermediate range nuclear weapons and in the event of a Soviet attack on NATO, the United States would have only the option of using short range, front line based nonstrategic nuclear weapons early in the conflict or risk their loss to an advancing Soviet Army. Soviet Army. As a result, intermediate range weapon systems increased NATO's deterrence strategy in that these weapons did not require early committal and could threaten targets within the Soviet Union. The intermediate range weapons deployed by the United States in Europe bridged a critical gap between the operational battlefield use of nonstrategic nuclear weapons and a large-scale nuclear exchange between the continental U.S. and the Soviet Union. However, in closing this gap, the United States essentially blurred the line between the battlefield use of nuclear weapons

^{154 &}quot;Refuting Russian Allegations of U.S. Noncompliance with the INF Treaty," United States Department of State, December 8, 2017, https://www.state.gov/refuting-russian-allegations-of-u-s-noncompliance-with-the-inf-treaty/; "Statement on Russia's Failure to Comply with the Intermediate-Range Nuclear Forces (INF) Treaty," NATO, February 1, 2019, https://www.nato.int/cps/en/natohq/news_162996.htm.

¹⁵⁵ Amy Woolf, Russian Compliance with the Intermediate Range Nuclear Forces (INF) Treaty: Background and Issues for Congress, R43832 (Washington, D.C.: Congressional Research Service, 2019), 10–12, https://crsreports.congress.gov/product/pdf/R/R43832/33.

¹⁵⁶ Woolf, Russian Compliance with the Intermediate Range Nuclear Forces (INF) Treaty: Background and Issues for Congress, 11.

and regional deterrence in terms of the U.S. concept of escalation control during the Cold War. 157

The purpose of intermediate range missiles varied between the U.S. and the Soviet Union. The CRS reports indicates that the deployment of U.S. intermediate range missiles in Europe served two purposes. First, the deployment of U.S. intermediate range missiles in Europe negated concerns from strategists within NATO. The deployment of Soviet intermediate range weapons during the Cold War raised concerns among NATO states (which lacked the capacity of intermediate range response) that the U.S.S.R.'s intermediate range capabilities could isolate NATO from the support of U.S. strategic missiles effectively decoupling the U.S. from its European allies. 158 Second, the deployment of these systems provided political leverage for the United States to negotiate with the Soviet Union for the reduction of intermediate range nuclear missiles in the European theater. 159 In contrast, Soviet leaders assigned one role to their intermediate range missiles. According to Schulte, Soviet leaders believed that U.S./NATO forces would execute the first-use of nuclear weapons; under this assumption, Soviet intermediate range missiles and tactical nuclear weapons would be used early in a war of attrition to set the conditions for air and land forces to advance into Europe. 160 While the U.S. pursued intermediate range weapons to extend deterrence, bolster credibility, and provide political leverage for negotiations, the Soviet Union strictly viewed these systems as an integrated component of operational plans that supported an overall strategy.

¹⁵⁷ Woolf, Russian Compliance with the Intermediate Range Nuclear Forces (INF) Treaty: Background and Issues for Congress, 10.

¹⁵⁸ Paul Schulte, "Tactical Nuclear Weapons in NATO and Beyond: A Historical and Thematic Examination," in *Tactical Nuclear Weapons and NATO*, ed. Tom Nichols, Douglas Stuart and Jeffrey McCausland (Carlisle, PA: Strategic Studies Institute, 2012), 25; Walter Slocombe, "Extended Deterrence," *Washington Quarterly* 7, issue no. 4 (Fall 1984): 93–94, https://doi.org/10.1080/01636608409550064; Woolf, *Russian Compliance with the Intermediate Range Nuclear Forces (INF) Treaty: Background and Issues for Congress*, 11.

¹⁵⁹ Woolf, Russian Compliance with the Intermediate Range Nuclear Forces (INF) Treaty: Background and Issues for Congress, 12.

¹⁶⁰ Schulte, "Tactical Nuclear Weapons in NATO and Beyond: A Historical and Thematic Examination," 31.

Comparing Russia's potential justifications for ground-based intermediate range missiles to historical intents for intermediate range missiles in Europe and current threats reveals potential solutions. According to former Secretary of Defense Robert Gates, former Russian Minister of Defense Sergei Ivanov expressed Russia's desire to withdraw from the INF treaty due to the need to counter intermediate range missiles from Iran, Pakistan, and China. However, Russian relations with Iran, Pakistan and China do not appear tense in nature. Ica Ivanov is also cited by the Carnegie Moscow Center as expressing concern over the intermediate range missile capabilities of the states that form an arc from North Korea to Israel and include Pakistan, India and Iran. Ica Ivanov's statement implies a nuclear intent to the dual-capable 9M729 as all states mentioned by Ivanov are nuclear capable (with the exception of the nuclear ambitious Iran).

Gates also notes that Ivanov assured him that should the Russian Federation develop intermediate range missiles, Russia would not deploy them in the west but rather in the south and east—to counter the states mentioned earlier. ¹⁶⁴ The Center for Strategic and International Studies reports that Russia deployed two 9M729 battalions; both battalions were located in Kapustin Yar until one was moved to an unknown operational base. ¹⁶⁵ In a press briefing, Director of National Intelligence Daniel Coats states "Russia continues to press forward, and as of late 2018, has fielded multiple battalions of 9M729 missiles, which pose a direct conventional and nuclear threat against most of Europe and

¹⁶¹ Robert Gates, Duty: Memoirs of a Secretary at War (New York: Alfred A. Knopf, 2014), 154.

¹⁶² James Dobbins, Howard Shatz and Ali Wyne, "A Warming Trend in China-Russia Relations," RAND Corporation, April 18, 2019, https://www.rand.org/blog/2019/04/a-warming-trend-in-china-russia-relations.html; Laura Seligman, "Pentagon Wary of Russia-Iran Cooperation," *Foreign Policy*, May 31, 2019, https://foreignpolicy.com/2019/05/31/trump-putin-syria-tehran-pentagon-wary-of-russia-iran-cooperation/.

¹⁶³ Petr Topychkanov, "Is Russia Afraid of Chinese and Indian Missiles?," Carnegie Moscow Center, March 11, 2014, https://carnegie.ru/commentary/57100.

¹⁶⁴ Gates, Duty: Memoirs of a Secretary at War, 154.

^{165 &}quot;SSC-8 (Novator 9M729)," Center for Strategic and International Studies, January 23, 2019, https://missilethreat.csis.org/missile/ssc-8-novator-9m729/.

parts of Asia." ¹⁶⁶ *Radio Free Europe* alleges that Russia deployed four 9M729 battalions: one battalion in Kamyshlov (south central Russia), one battalion at its test site in Kapustin Yar (south Russia), one battalion in Mozdok, North Ossetia (southwest Russia) and one battalion outside of Moscow in Shuya (western Russia). ¹⁶⁷ While the deployment 9M729 battalions in Kamyshlov and Kapustin Yar are consistent with Ivanov's statements to Secretary Gates, the alleged deployment of these battalions in North Ossetia and, more importantly, near Moscow, seem to contradict Ivanov's justification for maintaining parity with periphery states.

The purpose of the 9M729 is most likely one of offensive operations against European targets. It is unlikely that the Russian 9M729 missile system was developed and designed as a political tool to usher negotiations as the U.S. has maintained its commitments to the INF treaty and the U.S. has made multiple, unsuccessful attempts to discuss nonstrategic weapons reductions with Russia. Further, it appears that 9M729 systems are in a better position to engage targets in Europe than the Middle East or Asia and are not intended to maintain parity with states on Russia's southern and western periphery. In this case, the 9M729's purpose is either aimed at regional deterrence in Europe or as an offensive weapon against European targets.

Russia's secret development of the 9M729 and its continued denial of the INF Treaty violation is telling and suggests an "escalate to de-escalate" strategy. If the role of the 9M729 is aimed at deterrence, the covert development, and continued denial, of the system defies the concept of deterrence. Director Coats concludes that the 9M729 is designed to target European military and economic assets and to allow Russia to coerce

^{166 &}quot;Director of National Intelligence Daniel Coats on Russia's Intermediate-Range Nuclear Forces (INF) Treaty Violation," Office of the Director of National Intelligence, November 30, 2018, https://www.dni.gov/index.php/newsroom/speeches-interviews/item/1923-director-of-national-intelligence-daniel-coats-on-russia-s-inf-treaty-violation.

^{167 &}quot;Report: Russia Has Deployed More Medium-Range Cruise Missiles Than Previously Thought," *Radio Free Europe/Radio Liberty*, February 10, 2019, https://www.rferl.org/a/report-russia-has-deployed-more-medium-range-cruise-missiles-than-previously-thought/29761868.html.

¹⁶⁸ Woolf, Nonstrategic Nuclear Weapons, 2.

NATO members.¹⁶⁹ This is consistent with an "escalate to de-escalate" strategy in that Russia would first need to demonstrate to European decision-makers that the 9M729 is capable of inflicting damage in NATO states. The dual-capable nature of the 9M729, targeting non-civilian assets, aids Russia in controlling escalation through a demonstrative strike with the use of conventional warheads and the threat of future nuclear payloads.

D. CONCLUSION

Russia's capabilities and recent technological development suggests an escalatory nature to Russian nuclear strategy. Despite remarkable strides in Russian military reforms that have contributed to a professional, disciplined, and well-equipped force, Russia continues to place emphasis on the role of nuclear weapons—specifically nonstrategic nuclear weapons. An argument that Russia's reduction in nonstrategic nuclear weapons over the past several decades as evidence of reduced reliance on nonstrategic nuclear weapons does not appear valid. Rather, Russia's continued maintenance of a nonstrategic stockpile of at least twice the size of the U.S. nonstrategic stockpile suggests an important role of Russian nonstrategic nuclear weapons.

Russia's emphasis on nonstrategic nuclear weapons defies the logic of parity with the United States or China. China possesses very few, if any, nonstrategic nuclear weapons and the United States deploys only a small number of low-yield gravity bombs within Europe. However, given the numerical superiority of Chinese military forces and its vast border with Russia, Russia's maintenance of a large nonstrategic nuclear stockpile and its development of dual-capable delivery systems may indicate an operational role for nonstrategic nuclear weapons. Further, it appears that Russian nonstrategic nuclear weapons are not used as a political bargaining tool as the U.S. has made repeated and unsuccessful attempts to discuss negotiations on nonstrategic nuclear weapons with Russia.

Russia's emphasis on precision air, sea, and land-based missiles that fall within the range parameters of the INF Treaty suggest that these systems are designed for use in the European theater (a stated area of contention in accordance with Russian military doctrine).

¹⁶⁹ Office of the Director of National Intelligence, "Director of National Intelligence Daniel Coats on Russia's Intermediate-Range Nuclear Forces (INF) Treaty Violation."

These systems serve both as a regional deterrence against NATO states and may be used to threaten escalation through their dual-capable nature. The denied development of the ground-based 9M729 in violation of the INF Treaty further suggests that Russian military planners would have expected the need to demonstrate the weapon's ability (and Russian willingness) for use against NATO states.

IV. EXERCISES

Russia's continued use of nuclear forces in major exercises indicate that Russia focuses on operationalizing the role of nuclear weapons much like the former U.S.S.R. Analysis of Russia's annual exercises provide ample evidence of an "escalate to deescalate" strategy but also reveals a perpetual willingness to operationally use nuclear weapons. This differs greatly from both the United States and Chinese approaches to military exercises and is a telling sign that although Russia is capable of attempting to deescalate a conflict via the use of limited nuclear employment, Russia mainly relies on its nuclear weapons to deter conflict and if, necessary, escalate to the use of nuclear weapons as a warfighting tool.

Many analysts draw attention to Russia's military exercises as supporting evidence of an ongoing "escalate to de-escalate" strategy. Most notably, the Zapad (West) 1999 exercise is used to illustrate these arguments. Some analysts further submit that the Russian Federation integrated the use of nuclear weapons in every major exercise since the infamous Zapad 1999 exercise wherein the Russian Federation engaged Western targets with nuclear weapons. Sokov's assessment in 2014 notes that every large-scale Russian military exercise since 2000 included the use of simulated, limited nuclear strikes. Although this research did not definitively confirm the use of limited nuclear strikes in every exercise, it does reveal two key roles for nuclear weapons in Russian military strategy: deterrence and warfighting.

Russian military exercises have increased in size and complexity throughout the years since annual exercises were re-implemented by the Russian Federation. Further, the Russian Ministry of Defense re-introduced snap exercises into the military lexicon and practices—a former Soviet practice that was unimplemented by the Russian Federation for nearly two decades. Annual exercises, snap drills, and unit/Military District training

¹⁷⁰ Sokov, "Why Russia Calls a Limited Nuclear Strike 'De-Escalation."

¹⁷¹ Johan Norberg, *Training for War: Russia's Strategic-level Military Exercises 2009–2017*, FOI-R—4627--SE (Stockholm, Sweden: Swedish Defense Research Agency, 2018), 33, https://www.foi.se/rapportsammanfattning?reportNo=FOI-R--4627--SE.

vary in its size and focus but as Petraitis suggests, are often conducted in conjunction with one another to mimic a prolonged conflict and avoid international reporting requirements. Annual exercises are generally associated by name with the region in which they are conducted but as Johnson notes in the *NATO Review*, it is just as easy to exercise the military on one end of the country for execution on another. 173

Despite the increased capabilities of Russia's conventional military capacity, evidence suggests that Russian nuclear forces have been included in every major exercise since the infamous Zapad 1999 exercise. To complicate this matter, however, Russia's integration of dual-capable weapon systems during these exercises makes an accurate assessment difficult as Western observers lose a critical degree of fidelity on the payloads associated with the simulated use of dual-capable systems on an adversary during an exercise.

A. ANNUAL EXERCISES, SNAP DRILLS, AND MILITARY TRAINING

The Russian Federation conducts two notable types of military training to include annual Strategic Exercises (STRATEXes) and Comprehensive Surprise Combat Readiness Inspections (SCRIs). Strategic Exercises have been conducted annually since 2009 and include approximately one week of maneuver operations in two phases. ¹⁷⁴ Traditionally, the first phase of STRATEXs consists of stopping an adversarial advance and is followed by the second phase which focuses on a counterattack to "evict enemy forces." ¹⁷⁵ Generally speaking, STRATEXs are named in accordance with the region in which they are conducted. For instance, Zapad-2017 (West-2017) or Vostok-2014 (East-2014). In 2013, the Russian Federation reinstituted SCRIs (also referred to as snap exercises by

¹⁷² Daivis Petraitis, "The Anatomy of Zapad-2017: Certain Features of Russian Military Planning," *Lithuanian Annual Strategic Review* 16, no. 1 (December 2018), https://content.sciendo.com/view/journals/lasr/16/1/article-p229.xml.

¹⁷³ Dave Johnson, "VOSTOK 2018: Ten Years of Russian Strategic Exercises and Warfare Preparation," *NATO Review*, December 12, 2018, https://www.nato.int/docu/review/2018/Also-in-2018/vostok-2018-ten-years-of-russian-strategic-exercises-and-warfare-preparation-military-exercices/EN/index.htm.

¹⁷⁴ Norberg, Training for War: Russia's Strategic-level Military Exercises 2009–2017, 32–33.

¹⁷⁵ Norbert, Training for War: Russia's Strategic-level Military Exercises 2009–2017, 32–33.

Western analysts) for the first time since the Cold War.¹⁷⁶ Snap exercises may be comprehensive in that they involve multiple formations or nearly all of a military district (MD) or may be partial—testing specific unit readiness.¹⁷⁷ Norberg asserts the primary difference between the two is that STRATEXes focus on the conduct of war while snap exercises ensures Russian forces possess the ability to mobilize for war.¹⁷⁸

The differentiation between STRATEXes and snap exercises is important to note. Individually, snap exercises test particular functions of military readiness and capability. Given the time constrained environment of STRATEXes, the Russian Federation cannot ultimately mobilize, fight, and terminate a notional conflict at the regional, or potentially global, level in the period of one week. The Russian Federation is additionally constrained by the Organization for Security and Co-operation in Europe (OSCE) through the 2011 Vienna Document which requires outside observation of military exercises meeting the size threshold of certain military capabilities.

Daivis Petraitis, a Deputy Director of the Department of International Relations and Operations under Lithuania's Ministry of National Defense, provides compelling evidence that the Russian Federation combines the use of snap exercises with STRATEXes to avoid international attention, enable deception, and maintain secrecy. ¹⁸¹ Both Petraitis and Norberg further suggest that the Russian Federation combines STRATEXes and snap exercises to achieve overall training objectives. ¹⁸² Petraitis submits that the Russian Federation combined these two types of training to execute plans that more closely mimic

¹⁷⁶ Norberg, Training for War: Russia's Strategic-level Military Exercises 2009–2017, 33.

¹⁷⁷ Norberg, Training for War: Russia's Strategic-level Military Exercises 2009–2017, 33.

¹⁷⁸ Norberg, Training for War: Russia's Strategic-level Military Exercises 2009–2017, 33.

¹⁷⁹ Petraitis, "The Anatomy of Zapad-2017: Certain Features of Russian Military Planning," 233; Norberg, *Training for War: Russia's Strategic-level Military Exercises 2009–2017*, 64, 72–73, 84.

^{180 &}quot;Vienna Document 2011: On Confidence- and Security-Building Measures," Organization for Security and Co-operation in Europe, November 30, 2011, 24, https://www.osce.org/fsc/86597?download=true; Norberg, *Training for War: Russia's Strategic-level Military Exercises* 2009–2017, 63.

¹⁸¹ Petraitis, "The Anatomy of Zapad-2017: Certain Features of Russian Military Planning," 234.

¹⁸² Petraitis, "The Anatomy of Zapad-2017: Certain Features of Russian Military Planning," 233; Norberg, *Training for War: Russia's Strategic-level Military Exercises* 2009–2017, 64, 72–73, 84.

real-time operations throughout the various stages of conflict and ensure synchronization in time and space. Petraitis' assessment appears accurate as a recent article from *The Moscow Times* seemingly blurs the line between the annual exercise Vostok 2018 and snap exercises. This implies that Russian annual exercises require far more analysis and cannot be taken at face-value to determine Russian nuclear intentions.

Since 2009, Russia has demonstrated an increasingly effective ability to command, control, sustain, and fight prolonged conflicts with a tactically and operationally effective conventional military and is prepared to mobilize its society to achieve political aims through military force. 185 Despite Russia's increased capabilities, effective command and control, and tactically proficient conventional forces, Russia continues to integrate nuclear weapons into annual training exercises. This indicates that Russia is prepared to operationalize the use of nuclear weapons during a prolonged conflict.

B. THE USE OF NUCLEAR WEAPONS IN MILITARY EXERCISES

The 1999 Zapad exercise quickly gathered the attention of Western analysts concerned with Russian nuclear strategy. According to Kipp, the Russian Federation exercised the concept of de-escalation during Zapad 1999 which exercised Russia's ability to militarily respond to a NATO attack on Russia in the Baltics. ¹⁸⁶ According to Kipp, the Russian Federation launched limited nuclear strikes after NATO precision missiles degraded Russia's ability to further combat operations. ¹⁸⁷ The Zapad 1999 exercise appears to apply the concept of "escalate to de-escalate" and forced Russian officials to evaluate the role of nuclear weapons in deterring precision-strike attacks. ¹⁸⁸ However,

¹⁸³ Petraitis, "The Anatomy of Zapad-2017: Certain Features of Russian Military Planning," 233.

¹⁸⁴ "Russia Prepares 'Largest War Games Since 1981' With Combat Readiness Drills," *The Moscow Times*, August 20, 2018, https://www.themoscowtimes.com/2018/08/20/russia-prepares-largest-war-games-since-1981-with-combat-readiness-drills-a62576.

¹⁸⁵ Norberg, Training for War: Russia's Strategic-level Military Exercises 2009–2017, 45–48.

¹⁸⁶ Jacob Kipp, "Russia's Nonstrategic Nuclear Weapons," *Military Review* 81, no. 3 (May-June 2001): 30, ProQuest.

¹⁸⁷ Jacob Kipp, "Russia's Nonstrategic Nuclear Weapons," 30.

¹⁸⁸ Jacob Kipp, "Russia's Nonstrategic Nuclear Weapons," 31.

even in 2001, Kipp notes that Russia's reliance on nonstrategic nuclear weapons would not suffice as a long-term solution and indicates an internal debate ensued among Russia's strategic community. The answer as to which concept won the debate would not reveal itself for ten years.

C. **ZAPAD 2009**

The Zapad 2009 exercise was the first conducted after a long series of military reform. ¹⁹⁰ Petraitis submits that the ongoing military reform in Russia during the late 2000s remained inadequate to mount a successful defense against NATO forces and resulted in the Russian Federation's use of a simulated tactical nuclear strike during the exercise as a message to Western strategists—a message intended to buy the Russian Federation time to complete its military reforms. ¹⁹¹ In this sense, Russia's use of tactical nuclear weapons directly supports an "escalate to de-escalate" concept and directly contradicts some beliefs that Russia's subsequently published 2010 Military Doctrine raises the threshold for nuclear employment.

D. **VOSTOK 2010**

The Vostok 2010 exercise occurred from June 29, 2010 through July 8, 2010 in Russia's Far East (most likely a scenario against China) and included a nuclear component to the exercise. Norberg notes that when compared to exercises conducted in 2009, Vostok 2010 consisted of significantly more troops and most likely exceeded 20,000 personnel; 193 this supports the hypothesis that Vostok 2010 simulated an exercise against a numerically superior Chinese military threat. The numerical superiority of the Chinese military and the vast maneuver area along the Chinese/Russian border are key

¹⁸⁹ Jacob Kipp, "Russia's Nonstrategic Nuclear Weapons," 31.

¹⁹⁰ Defense Intelligence Agency, *Russia Military Power: Building a Military to Support Great Power Aspirations*, 11–13; Petraitis, "The Anatomy of Zapad-2017: Certain Features of Russian Military Planning," 237.

¹⁹¹ Petraitis, "The Anatomy of Zapad-2017: Certain Features of Russian Military Planning," 237.

¹⁹² Norberg, Training for War: Russia's Strategic-level Military Exercises 2009–2017, 59.

¹⁹³ Norberg, Training for War: Russia's Strategic-level Military Exercises 2009–2017, 59.

considerations in this exercise which most likely affected the decision to use nuclear weapons.

According to Norberg, during the exercise, the advancing enemy triggered a nuclear mine. 194 Additionally, Parker's report for the Institute for National Strategic Studies indicates that the Russian Federation concluded the Vostok 2010 exercise with a limited nuclear strike. 195 The context for the use of nuclear weapons during Vostok 2010 seemingly supports an "escalate to de-escalate" strategy but additionally suggests an operational role for nuclear weapons in Russian strategy to defeat a larger enemy and preserve Russian combat power against a numerically superior opponent.

E. KAZKAV 2012 AND THE NORTHERN FLEET EXERCISE

Russia's Kazkav 2012 exercise aroused suspicions from Western analysists while Russia's use of nuclear weapons during this exercise is not definitive. Although Russia denied any connection between Kazkav 2012 and conflict with Georgia, some analysts expressed concern over the potential connection based on Russia's reluctance in both providing details of the exercise and allowing foreign observers to oversee the exercise. 197 It is important to note the location of this exercise as Russia's Southern Military District is essentially located on Russia's southeastern territory and borders Georgia; a conflict in the this region would most likely constitute as a local-war under Russian military doctrine. 198

According to McDermott, the Russian Federation conducted a live-fire drill during Kazkav 2012 of the land-based, dual-capable, Iskander-M missile system which "possibly suggests a rehearsal of a tactical nuclear use in a de-escalatory means against a mainly

¹⁹⁴ Norberg, Training for War: Russia's Strategic-level Military Exercises 2009–2017, 60.

¹⁹⁵ John Parker, *Russia's Revival: Ambitions, Limitations, and Opportunities for the United States*, Strategic Perspectives No. 3 (Washington, D.C.: National Defense University, 2011), https://apps.dtic.mil/dtic/tr/fulltext/u2/a546683.pdf.

¹⁹⁶ Roger McDermott, "Kavkaz 2012 Rehearses Defense of Southern Russia," *Eurasia Daily Monitor* 9, no. 174 (September 2012), https://jamestown.org/program/kavkaz-2012-rehearses-defense-of-southern-russia/.

¹⁹⁷ McDermott, "Kavkaz 2012 Rehearses Defense of Southern Russia."

¹⁹⁸ The Embassy of the Russian Federation to the United Kingdom of Great Britain and Northern Ireland, "The Military Doctrine of the Russian Federation [2014]."

conventionally armed state actor or actors."¹⁹⁹ Some may argue that the use of the dual-capable Iskander does not provide evidence of nuclear intentions. However, Norberg suggests a possible connection between an "unnamed Northern Fleet exercise" and Kavkaz 2012.²⁰⁰ The Northern Fleet is a "key component in Russia's second-strike capability" and conducted an exercise immediately following Kavkaz 2012 with the 1st Air Force and Air Defense Command of the Western Military District along with ground forces.²⁰¹ Norberg suggests that the unnamed Northern Fleet exercise may have been an extension of the Kazkav 2012 scenario that escalated to nuclear confrontation.²⁰² The notion of these two exercises being linked is plausible for two reasons: (1) as Petraitis suggests, Russia uses unofficial exercises as a continuance of named exercises; (2) the concern of local-wars escalating to regional and global conflicts has been expressed in Russian military doctrine since 1993.²⁰³

The Northern Fleet exercise following Kavkaz 2012, if linked, supports the hypothesis that Russia views a nonstrategic nuclear strike more from an operational perspective than from an "escalate to de-escalate" concept. If the Iskander-M launched during the Kavkaz 2012 exercise delivered a conventional payload, there would be no need to deploy the Northern Fleet one thousand miles away. If the Iskander-M launch did, in fact, deliver a nuclear payload, the deployment of Russia's premier second-strike capability indicates that either another state responded to Russia's nonstrategic nuclear attack with nuclear weapons or Russia is prepared to fight a potential nuclear exchange. Strikingly similar situations involving the deployment of Russia's Northern Fleet occurred with annual exercises Zapad 2013, Vostok 2014, Tsentr 2015, Kavkaz 2016, and Zapad 2017.²⁰⁴

¹⁹⁹ McDermott, "Kavkaz 2012 Rehearses Defense of Southern Russia."

²⁰⁰ Norberg, Training for War: Russia's Strategic-level Military Exercises 2009–2017, 61.

²⁰¹ Norberg, Training for War: Russia's Strategic-level Military Exercises 2009–2017, 61.

²⁰² Norberg, Training for War: Russia's Strategic-level Military Exercises 2009–2017, 62.

²⁰³ Federation of American Scientists, "Basic Provisions of the Military Doctrine of the Russian Federation."

²⁰⁴ Norberg, *Training for War: Russia's Strategic-level Military Exercises* 2009–2017, 63–74.

F. VOSTOK 2014

Vostok 2014 was notably larger than its predecessor in 2010 and exceeded the number of troops involved by approximately 135,000 service members. Norberg notes that Vostok 2014 also included an escalation from conventional arms to the employment of nuclear weapons through snap exercises conducted from the Central Military District that included the use of Russia's Strategic Missile Forces and Air Force assets. Purther, the employment of Russia's Northern Fleet indicates a furtherance of Russian nuclear use following Vostok 2014. Despite Russia's ability to effectively deploy, command, and control 155,000 service members during Vostok 2014, the use of nuclear weapons again appear as part of the Russian Federation's norm for strategic operations.

G. ZAPAD 2017

Zapad 2017 provides another example of the use of multiple exercises under one strategic context and also contained a nuclear component. Officially, Zapad 2017 involved Russian and Belarusian forces from September 14, 2017 through September 20, 2018. ²⁰⁸ The exercise scenario was one wherein the Russian Federation came to the aid of Belarus after extremist groups (aided by outside parties) threatened Belarus. ²⁰⁹ However, during Zapad 2017 the alleged terrorist enemy required Russian and Belarusian forces to commit large scale ground, air, and maritime assets in combined arms maneuvering for a period of three days. ²¹⁰ Norberg notes that three unnamed exercises occurred in parallel with Zapad 2017. ²¹¹ In addition to Russia's Western Military District, forces from Russia's Northern Fleet, Southern Military District, and Central Military District participated in exercises

²⁰⁵ Norberg, Training for War: Russia's Strategic-level Military Exercises 2009–2017, 64.

²⁰⁶ Norberg, Training for War: Russia's Strategic-level Military Exercises 2009–2017, 64, 66.

²⁰⁷ Norberg, Training for War: Russia's Strategic-level Military Exercises 2009–2017, 66.

²⁰⁸ Norberg, Training for War: Russia's Strategic-level Military Exercises 2009–2017, 71.

²⁰⁹ International Institute for Strategic Studies, "The Wider Implications of Zapad 2017," *Strategic Comments* 24, no. 1 (January 2018): iii, https://doi.org/10.1080/13567888.2018.1433105.

²¹⁰ Dave Johnson, "ZAPAD 2017 and Euro-Atlantic Security," *NATO Review*, December 12, 2017, https://www.nato.int/docu/review/2017/also-in-2017/zapad-2017-and-euro-atlantic-security-military-exercise-strategic-russia/EN/index.htm.

²¹¹ Norberg, *Training for War: Russia's Strategic-level Military Exercises* 2009–2017, 72–73.

synchronized with Zapad 2017.²¹² Johnson additionally notes that Zapad 2017 included multiple training exercises tied to the Zapad scenario to circumvent requirements outlined in the Vienna Document.²¹³ Either the Zapad 2017 exercise scenario quickly evolved from a local war to a global war in accordance with Russian military thinking or the Russian Federation intentionally trained for a fight against NATO; either way, the use of nuclear weapons during this exercise is not surprising.

Petraitis submits the Zapad 2017 exercise was comprised of a number of official and unofficial exercises that cumulatively provided Russia with the opportunity to wargame three stages of conflict: (1) an abrupt attack; (2) "safeguarding and extending achievements" and "stabilizing/terminating the conflict;" (3) "massive (total) state defense" and nuclear war.²¹⁴ According to his report, Petraitis concludes that live and simulated military actions from units not officially connected with Zapad 2017 exercised the first and second stages of conflict while forces officially associated with the exercise conducted training for the third stage of conflict.²¹⁵

During the first stage of Zapad 2017, Russian forces initiated an attack on enemy forces with the use of long-range precision munitions that involved strategic aircraft and naval assets and were followed by the deployment of airborne troops to seize specific locations. Conventional ground troops were then deployed and were assisted with short-range missiles. Although dual-capable missile systems were used during the first unofficial stage of Zapad 2017, there is no evidence that Russian forces deployed nuclear weapons.

Petraitis illustrates that the timing and type of exercises associated with the second stage of conflict directly supported the first stage. During this second stage, ground forces

²¹² Norberg, Training for War: Russia's Strategic-level Military Exercises 2009–2017, 36.

²¹³ Johnson, "ZAPAD 2017 and Euro-Atlantic Security."

²¹⁴ Petraitis, "The Anatomy of Zapad-2017: Certain Features of Russian Military Planning," 232.

²¹⁵ Petraitis, "The Anatomy of Zapad-2017: Certain Features of Russian Military Planning," 242.

²¹⁶ Petraitis, "The Anatomy of Zapad-2017: Certain Features of Russian Military Planning," 242.

²¹⁷ Petraitis, "The Anatomy of Zapad-2017: Certain Features of Russian Military Planning," 245.

continued to fight for captured territory and were followed by defensive operations and entrenchment exercises supported by aviation assets, artillery, and electronic warfare capabilities. Petraitis indicates Russian forces achieved success during the second, unofficial stage of Zapad 2017 yet introduced nuclear weapons into the conflict with simulated launches of road-mobile intercontinental ballistic missiles (ICBMs) and Kalibr missiles from ballistic missile submarines to pressure enemy forces to negotiate. The introduction of nuclear forces demonstrates an "escalate to de-escalate" strategy if Petraitis is correct in his assessment that these synchronized, unnamed exercises that coincide precisely with Russia's concept of warfighting are linked to Zapad 2017.

The Zapad 2017 exercise is both unique and frightening in that it demonstrates the Russian Federation's degree of resolve to follow through with nuclear forces and suggests a more operational approach to the use of nuclear weapons. The third stage of Zapad 2017 officially exercised the Russian Federation's ability to conduct large-scale defensive operations and Petraitis' assessment again demonstrates that the Russian Federation used unnamed exercises unofficially associated with Zapad 2017 to compliment the official exercise—to include nuclear forces.²²⁰ Petraitis submits that the test launch of a Yars ICBM occurred on September 12, 2017, two days before units officially associated with the exercise conducted defensive operations.²²¹ The Yars ICBM is designed for long-range use and is only equipped to carry a nuclear payload.²²²

The use of this weapon preceding defensive operations (third stage of Zapad 2017) may suggest, to some analysts, that it was intended as an escalatory message to deter Western aggression. However, the fact that nuclear forces were deployed during the second, unofficial stage, of Zapad 2017 makes this assessment unlikely. During a Western offensive/Russian defensive stand-still, Petraitis indicates the Russian Federation exercised

²¹⁸ Petraitis, "The Anatomy of Zapad-2017: Certain Features of Russian Military Planning," 250.

²¹⁹ Petraitis, "The Anatomy of Zapad-2017: Certain Features of Russian Military Planning," 251.

²²⁰ Petraitis, "The Anatomy of Zapad-2017: Certain Features of Russian Military Planning," 255.

²²¹ Petraitis, "The Anatomy of Zapad-2017: Certain Features of Russian Military Planning," 255, 261–262.

²²² Missile Defense Project, "Missiles of Russia."

the limited use of nuclear weapons via Iskander missiles, road mobile ICBMs, and nuclear capable aircraft to strike targets behind the front line.²²³ The use of limited nuclear forces during defensive operations after the launch of an ICBM indicates that the Russian Federation operationalized nuclear strikes after its escalatory deterrence message failed in the second stage. Finally, Petraitis' analysis submits the Russian Federation exercised a massive nuclear exchange by Russia's nuclear triad and indicates that the Russian Federation demonstrated the ability to respond to a nuclear attack from the West.²²⁴

Some analysts may argue that the simulated nuclear exercises are not associated with Zapad 2017 and are strictly coincidental.²²⁵ Further, the Russian Federation adamantly denied that these events were conducted in conjunction with Zapad 2017.²²⁶ However, Petraitis' analysis of the timing and type of operations unofficially associated with Zapad 2017 directly support the official exercise scenario and are impeccably synchronized.²²⁷ The precision with which unofficial and official exercises occurred with respect to one another defies coincidence and suggests that the Zapad 2017 exercises integrated a failed attempt to de-escalate a conflict, resorted to the operational use of nonstrategic nuclear weapons, and demonstrated the willingness to engage in a nuclear exchange with Western forces.

Other analysts adopt a different perspective to Zapad 2017 and submit the exercise was substantially smaller than Westerners believe. According to Kofman, a Senior Research Scientist at the Center for Naval Analyses and a Fellow at the Wilson Center, Kennan Institute, Russia did not train for an all-out war against NATO but rather a conflict

²²³ Petraitis, "The Anatomy of Zapad-2017: Certain Features of Russian Military Planning," 260.

²²⁴ Petraitis, "The Anatomy of Zapad-2017: Certain Features of Russian Military Planning," 260–261.

²²⁵ Bruno Tertrais, "Does Russia Really Include Limited Nuclear Strikes in its Large-scale Military Exercises?," International Institute for Strategic Studies, February 15, 2018, https://www.iiss.org/blogs/survival-blog/2018/02/russia-nuclear.

²²⁶ Pavel Felgenhauer, "Lukashenka and Russian Officials Part Ways During Zapad 2017," *Eurasia Daily Monitor* 14, no. 116 (September 2017), https://jamestown.org/program/lukashenka-and-russian-officials-part-ways-during-zapad-2017/; Petraitis, "The Anatomy of Zapad-2017: Certain Features of Russian Military Planning," 256.

²²⁷ Petraitis, "The Anatomy of Zapad-2017: Certain Features of Russian Military Planning," 246–247, 252–254, 261–265.

against a coalition of select NATO members with support from the United States.²²⁸ Kofman submits that Zapad 2017 occurred in two phases wherein Russian forces intervened on behalf of Belarus in a conflict with select NATO states during the first phase but executed limited offensive actions during the second phase.²²⁹ Kofman acknowledges that Zapad 2017, though smaller in scale, escalated horizontally during the initial phase, which included the use of (Chemical, Biological, Radiological, and Nuclear) CBRN units and likely escalated vertically during the end of the second phase with the employment of nonstrategic nuclear weapons—potentially with ground launched cruise missiles and medium bombers.²³⁰ Johnson also notes the use of dual-capable ground launched cruise missiles during Zapad 2017.²³¹ Further, Kofman submits that the Yars test launches that Petraitis associates with Zapad 2017 were independent of the exercise.²³² Kofman's account of Zapad 2017 suggests that Zapad 2017 was smaller in scale and did not entail a large-scale war with NATO/U.S. forces but does suggest that Russia continues consideration of escalatory nuclear attacks to de-escalate conflicts.

Both Kofman and Johnson indicate that Russia included the use of CBRN forces during Zapad 2017. According to Johnson, Zapad 2017 consisted of "extensive exercise activity by Chemical, Biological, Radiological, and Nuclear (CBRN) defence units." ²³³ The inclusion of CBRN units during Zapad 2017 under the official exercise scenario of Russian and Belarusian forces combating terrorists contains validity. However, the level of military commitment to Zapad 2017 far exceeded what is necessary in dealing with a terrorist threat as Petraitis, Johnson, and Kofman submit Zapad 2017 was more in line with the traditional Russia/NATO scenario. It is highly unlikely that NATO forces or the United States would engage in chemical or biological warfare in a conflict with any state; it is also

²²⁸ Michael Kofman, "What Actually Happened During Zapad 2017," *Russian Military Analysis* (blog), December 22, 2017, https://russianmilitaryanalysis.wordpress.com/2017/12/22/what-actually-happened-during-zapad-2017/.

²²⁹ Kofman, "What Actually Happened During Zapad 2017."

²³⁰ Kofman, "What Actually Happened During Zapad 2017."

²³¹ Johnson, "ZAPAD 2017 and Euro-Atlantic Security."

²³² Kofman, "What Actually Happened During Zapad 2017."

²³³ Johnson, "ZAPAD 2017 and Euro-Atlantic Security."

unlikely that either NATO member states or the United States would initiate the first-use of nuclear weapons—especially within NATO territory. This suggests that Russian forces were prepared to execute or conduct follow-on operations after a Western nuclear strike provoked by Russian limited nuclear employment.

The Zapad 2017 exercise encompassed forces both officially affiliated with the exercise and forces unofficially affiliated regardless of which perspective one views the Zapad 2017 exercise and is unquestionably a military scenario between Russia and NATO (or a coalition of select NATO states). The key differences between these assessments is the use of strategic nuclear weapons in Petraitis' assessment versus the potentially more limited use of nuclear weapons as suggested by Johnson and Kofman. One could argue that the use of dual-capable missiles during this exercise does not provide proof of an escalatory strategy but the inclusion of CBRN defense units in Zapad 2017 suggests that Russia either executed limited nonstrategic nuclear strikes or is prepared to do so based on the developing situation.

H. VOSTOK 2018

Vostok 2018 was unique in that there is no explicit use of nuclear weapons during the exercise and that the Russian Federation conducted Vostok 2018 jointly with the Chinese military. According to NATO, Vostok 2018 aimed to achieve two purposes: test the combat readiness of Russian troops and demonstrate a working relationship with China. Under the context of diplomatic relations with China, it is not surprising that Russian forces did not introduce the idea of nuclear weapons into the exercise scenario. However, Johnson notes the continued use of dual-capable weapon systems during the exercise to include the use of dual-capable missiles against adversarial fleets. ²³⁵ Furthermore, the Ministry of Defense of the Russian Federation announced a Strategic Missile Forces exercise following the conclusion of Vostok 2018. ²³⁶ Russia's

²³⁴ Johnson, "VOSTOK 2018: Ten Years of Russian Strategic Exercises and Warfare Preparation."

²³⁵ Johnson, "VOSTOK 2018: Ten Years of Russian Strategic Exercises and Warfare Preparation."

^{236 &}quot;Large-scale Command Post Exercise of Strategic Missile Forces to be Held in Saratov Region," Ministry of Defense of the Russian Federation, September 24, 2018, https://eng.mil.ru/en/structure/forces/strategic_rocket/news/more.htm?id=12196732@egNews.

announcement of the Strategic Missile Forces exercise also notes the involvement of RChBD (Radiation, Chemical and Biological Defense) equipment.²³⁷ This research did not identify any material that links the Strategic Missile Forces exercise with Vostok 2018 but the correlation bears similar resemblance to the Yars launches conducted at the end of Zapad 2017. Furthermore, the use of RChBD equipment during the exercise may indicate that Russian strategic assets trained in a contaminated (or expected contaminated) environment—suggesting the training scenario already escalated to a nuclear exchange.

I. EXERCISES WITHOUT THE USE OF NUCLEAR WEAPONS

The Russian Federation consistently demonstrates the willingness to deploy nuclear weapons in major exercise scenarios against NATO and China but has demonstrated a different strategic outlook on other exercises on Russia's periphery. Little evidence exists to prove Russia escalated from conventional to nuclear weapons during Zapad 2013, Tsentr 2015, and Kavkaz 2016. However, Russia's deployment of the Northern Fleet during these exercises reflect Russian doctrine and indicate that Russia views strategic forces as a deterrence mechanism to contain conflict at the local level and avoid Western intervention. Norberg notes that these exercises included the deployment of Russia's Northern Fleet as a second-strike capability but provides no indication that nuclear escalation occurred. Although Zysk suggests the use of nonstrategic nuclear weapons during Kavkaz 2016, this research revealed no further evidence of nuclear escalation during that exercise. With the strange exception of Zapad 2013, this indicates that Russia intended to display nuclear readiness in smaller conflicts to prevent local conflicts from escalating to regional or global war.

J. U.S. AND CHINA AND NUCLEAR EXERCISES

Training in the use of nuclear forces is not uncommon in the United States and there exists both similarities and differences between the training conducted by the Russian

²³⁷ Ministry of Defense of the Russian Federation, "Large-scale Command Post Exercise of Strategic Missile Forces to be Held in Saratov Region."

²³⁸ Norberg, Training for War: Russia's Strategic-level Military Exercises 2009–2017, 63–64, 66–71.

²³⁹ Zysk, "Escalation and Nuclear Weapons in Russia's Military Strategy," 6.

Federation and the U.S. Since 2005, U.S. Strategic Command (STRATCOM) has conducted Global Thunder, an annual exercises of its nuclear triad. While Global Thunder is intended to exercise command and control of all of STRATCOM's mission areas, there is a "specific focus on nuclear readiness." According to STRATCOM, Global Thunder exercises "test readiness and ensure a safe, secure, ready and reliable strategic deterrent force." This statement appears in line with a defensive and deterrence mindset; however, in keeping with current U.S. nuclear policy, STRATCOM further states that a component to its mission is to conduct "global operations in coordination with other combatant commands, services, appropriate U.S. government agencies, and allies to deter, detect and, if necessary, defeat strategic attacks against the United States and its allies." This statement may be easily perceived by Russian analysts as a willingness to operationally use U.S. strategic forces during a conflict.

The difference between U.S. exercises such as Global Thunder and Russian annual exercises is one of integrated scale. The scenarios surrounding Global Thunder exercises are both notional and classified but there is currently no evidence to suggest STRATCOM's Global Thunder exercises are linked with other ground unit training conducted by Combatant Commands or large-scale military training throughout the Department of Defense.²⁴⁴ In contrast, the Russian Federation integrates the use nuclear weapons into exercise scenarios conducted largely by ground troops and commanded by Moscow.

²⁴⁰ Ryan Lackey, "Global Thunder Keeps Airmen Ready for Anything," Fairchild Air Force Base, November 20, 2017, https://www.fairchild.af.mil/News/Article-Display/Article/1377868/global-thunder-keeps-airmen-ready-for-anything/.

²⁴¹ "U.S. Strategic Command Conducts Exercise Global Thunder," U.S. Strategic Command Public Affairs, October 29, 2018, https://www.stratcom.mil/Media/News/News-Article-View/Article/1675395/us-strategic-command-conducts-exercise-global-thunder/.

²⁴² U.S. Strategic Command Public Affairs, "U.S. Strategic Command Conducts Exercise Global Thunder."

²⁴³ U.S. Strategic Command Public Affairs, "U.S. Strategic Command Conducts Exercise Global Thunder."

^{244 &}quot;Exercise Global Thunder 17 Concludes," U.S. Strategic Command Public Affairs, November 2, 2016, https://www.afgsc.af.mil/News/Article-Display/Article/993846/exercise-global-thunder-17-concludes/.

Chinese nuclear exercises appear to remain consistent with its stated nuclear policy. Aside from the testing of individual weapons systems, this research did not reveal any exercises involving the concurrent use of Chinese ground forces with the use of nuclear weapons in an ongoing combat scenario. 245 *China Military Online*, the "official English-language military news website of the Chinese Armed Forces" reported in January 2019 that China's Rocket Force conducted simulated ICBM attacks. 246 Review of the scenario in which this exercise occurred reveals that China conducted the exercise in accordance with its declared nuclear policy. 247 China Military Online indicates that the simulated ICBM strikes were launched from hardened, underground bunkers and that soldiers trained on survivability exercises throughout the operation to ensure a second-strike capability. 248 As with U.S. nuclear exercises, this research revealed no large-scale Chinese military exercises that integrated nuclear weapons into an ongoing combat scenario with ground troops.

K. CONCLUSION

The analysis on Russia's annual strategic exercises and snap inspections reveal a Russian norm in operational and strategic thinking in that most escalate to the use of nuclear weapons. Norberg notes that the Russian military has been "training to fight major ground forces-centric operations often escalating into nuclear exchanges." In the few exercises wherein nuclear weapons were not used during the exercise, Russia clearly demonstrated and postured its nuclear potential with the deployment of its second-strike capabilities via the Northern Fleet. Russia's consistent use of nuclear forces during these exercises since 1999, and more importantly since 2009 following substantial military reforms, suggests that the Russian Federation continues to place emphasis not only on the

²⁴⁵ Kristensen and Norris, "Chinese Nuclear Forces, 2018."

²⁴⁶ "China's Rocket Force Conducts Mock ICBM Strike Exercise," *China Military Online*, January 23, 2019, http://english.chinamil.com.cn/view/2019-01/23/content 9411486.htm.

²⁴⁷ Federation of American Scientists, "China's National Defense in 2006."

²⁴⁸ China Military Online, "China's Rocket Force Conducts Mock ICBM Strike Exercise."

²⁴⁹ Norberg, Training for War: Russia's Strategic-level Military Exercises 2009–2017, 11.

deterrent capability of nuclear forces but the operational use of those forces in regional or global conflicts.

Some could argue that Russia's integration on nuclear forces during these exercises are no more than strategic messaging to Western audiences and consistent with a soft "escalate to de-escalate" concept. However, this research suggests that Russian military planners operationalize the use of these weapons through continued training and decisionmaking. Petraitis and Arbatov note the importance of military planning for the use of nuclear weapons from the Russian perspective and suggest that operational plans take precedence in military operations.²⁵⁰ Furthermore, according to Arbatov, Russian politicians seek the favor of military officers and have little involvement in the development of nuclear strategy.²⁵¹ Arbatov also notes a transition of responsibility in that the political leverage of deterrence is discarded once a conflict begins and the military assumes the primary role of nuclear warfighting.²⁵² Russia's focus on executing operations in accordance with plans and the military's increased responsibility to win a conflict in the event of deterrence failure further support the notion that Russia views nuclear weapons from an operational perspective and is prepared to use these weapons during a regional or large-scale conflict in lieu of losing. The United States military's adage of train as you fight may be exemplified by Russia's continued use of nuclear weapons in large exercises for twenty years which sets the precedence of an operational destiny for Russian nuclear weapons.

Additionally, early Russian military planners understood the potential issues associated with escalation and escalation control which led to internal debates on Russian nuclear strategy. Twenty years of Russian military exercises demonstrates that either Russian military planners view the concept of "escalate to de-escalate" as a hopeful benefit

²⁵⁰ Alexy Arbatov, "Understanding the US-Russia Nuclear Schism," *Survival* 59, no. 2 (April-May 2017): 44, http://dx.doi.org/10/1080/00396338.2017.1302189; Petraitis, "The Anatomy of Zapad-2017: Certain Features of Russian Military Planning," 229.

²⁵¹ Arbatov, "Understanding the US-Russia Nuclear Schism," 43-44, 47,

²⁵² Arbatov, "Understanding the US-Russia Nuclear Schism," 49.

to nuclear escalation or have simply discarded the idea of escalation control in favor of operational use by way of predetermined military plans.

Lastly, the Russian Federation proves unique in its exercises compared to the United States or China. Neither the United States nor China conduct nuclear exercises in conjunction with large-scale ground maneuver exercises. The United States and China do, however, exercise their nuclear capabilities but do so in a compartmentalized scenario. While the United States conducts exercises that are classified they do appear to exercise a range of nuclear tasks. However, recent Chinese military exercises continue to focus on its doctrinal application of second-strike, deterrence capabilities. The Russian Federation is the only major power to consistently exercise the use of nuclear weapons on both nonstrategic and strategic levels during annual exercises and in synchronization with ground movements.

V. CONCLUSION

This thesis examines aims to contribute to the current debate on whether or not the Russian Federation currently possesses an "escalate to de-escalate" nuclear strategy through a comprehensive look at the evolution of Russian military doctrine, capabilities and weapons development, and major annual exercises. The cumulative assessment of this research arrives in agreeance with the 2018 Nuclear Posture Review in that the Russian Federation possesses an "escalate to de-escalate" strategy. However, this research further suggests that Russia assigns an operational role for nonstrategic nuclear weapons in the event of large-scale conflict with either the United States (and/or its NATO allies) or China. Russia's military doctrine allows for the first-use of nuclear weapons and is augmented by the continued pursuit of short-range and intermediate-range weapon systems capable of delivering nuclear weapons. More importantly, Russia continues to exercise the use of nuclear weapons, including limited nuclear strikes, during large-scale military combined arms training. Russia's approach to nuclear policy through its military doctrine is comparable to the policy of the United States but Russia stands unique among the great power competitors in its continued development of precision, dual-capable weapon systems, maintenance of a significant nonstrategic nuclear stockpile, and large-scale ground exercises synchronized with the use of nuclear weapons.

A. DOCTRINE

The Russian Federation's 2014 Military Doctrine is vague in nature but does not prohibit the concept of "escalate to de-escalate." Since 1993, the Russian Federation has reserved the right for the first-use of nuclear weapons and explicitly associated conventional attacks against Russia with the potential for nuclear escalation. Russia's 2000 Military Doctrine expanded the role of nuclear weapons to safeguard its military forces and serve a role in regional conflicts. Russia's 2000 and 2014 military doctrines seemingly appears to shift emphasis away from the use of nuclear weapons but allows for the potential use of nuclear weapons either to de-escalate a conflict or to operationally contribute to warfighting efforts.

Russia's current military doctrine is not unlike the policy of the United States which provides the President of the United States with a nuclear option in response to a diverse array of potential threats. However, Chinese nuclear policy equally contrasts with those of Russia and the United States. China's second-strike, deterrence role for nuclear weapons indicates a confidence in China's position in the global security environment. However, as Xia notes, China may be compelled to alter is nuclear policy based on perceived threats to U.S. technologically advanced weapons and systems.²⁵³ Whereas the United States and Russia continue to maintain a near parity in nuclear doctrines.

Statements made by Russian officials immensely add to the complexity of interpreting Russian military doctrine. The more explicit ideas conveyed during internal debates among policy-makers and military officials contribute to the overall pool of doctrinal courses of action but are often not included in Russian doctrine. Further, statements are often contradicted over time and are based on the political relationship between Russia and the West—Russia essentially exploits the West's inability to understand Russian military doctrine. Analysis of key statements made by policy-makers and military officials provided little impact on the conclusion that Russia possesses an "escalate to de-escalate" strategy.

B. CAPABILITIES AND DEVELOPMENT

Russia's maintenance of a significantly larger nonstrategic nuclear stockpile in conjunction with Russia's efforts to develop and deploy dual-capable short-range and intermediate-range precision missiles supports an "escalate to de-escalate" strategy and facilitates Russia's operational use of nuclear weapons during a conflict. Russia maintains a nonstrategic nuclear stockpile at least twice the size of that of the United States and associates nonstrategic nuclear weapons with a number of delivery capabilities.

The disparity between Russia's nonstrategic nuclear arsenal when compared with those of the United States and China is telling. In contrast to the Russian Federation, the United States possesses far fewer nonstrategic nuclear weapons and is highly limited in the

²⁵³ Liping, "China's Nuclear Doctrine: Debates and Evolution."

means by which to deliver them. Further, nonstrategic nuclear weapons available to the United States for immediate use in Europe is remarkably small compared to the current number maintained by the Russian Federation. Although open-source information cannot confirm China's exact number of nonstrategic nuclear weapons, China's overall arsenal is grossly smaller than those of Russia and the United States. It is evident that Russia does not aim to seek parity with but rather seeks superiority to the United States and China in terms of nonstrategic nuclear weapons.

Russia's emphasis on dual-capable delivery systems, namely precision missiles, and its denial of its violation of the 1987 INF Treaty further supports an "escalate to deescalate" strategy and suggests the potential for operational use of nonstrategic nuclear weapons. Russia's ability to deliver dual-capable, short-range and intermediate-range missiles, extends to its ground, naval, and air forces. Despite Russia's ability to produce reliable, conventional precision missiles comparable to the United States, Russia continues to emphasize a nuclear role for developing technology.

C. EXERCISES

Russia's Zapad 1999 military exercise is often noted as a landmark indicator a Russian "escalate to de-escalate" strategy. The integration of nuclear weapons in the Zapad 1999 exercise is not necessarily surprising given the then Russian Federation's military and economic capabilities following the fall of the Soviet Union. However, since 1999, the Russian Federation incorporated the use (or simulated use) of nuclear weapons in four annual exercises with nuclear undertones in another six exercises.

Arguments that Russia's more recent use of dual-capable missiles during exercises is not proof of an "escalate to de-escalate" strategy appear valid until the exercise is viewed with respect to which assets are exercised in conjunction with the training scenario. Russia's consistent deployment of the Northern Fleet, mobilization of additional forces through snap exercises, and use of CBRN defense units indicate that Russia is prepared for conflict escalation and is prepared to fight a conflict after being targeted by a nuclear weapon.

In contrast, the United States (based on open-source information) exercises the use of its nuclear triad annually but does not exercise its nuclear capabilities with the real-time command and control of large ground operations. Furthermore, China's exercises involving the use of nuclear weapons appear consistent with its declared nuclear policy based on deterrence and second-strike capabilities. Russia's use of nuclear forces and nuclear capable forces during large-scale exercises indicates that Russia continues to wargame the use of nuclear weapons as a potential course of action—specifically for conflicts involving NATO or China.

D. WEIGHTED IMPORTANCE

This research concludes that of the four commonly evaluated criteria (doctrine, statements, weapon capabilities, and exercises), analysis of weapons capabilities and military exercises provide the greatest indication of Russian nuclear strategy. Russia's efforts in military reform since the fall of the Soviet Union does not contrast the rationality expected from a state undergoing significant changes to its government and economy. However, despite on-going reforms which has produced a capable conventional military, Russia's continued emphasis on dual-capable weapons capable of delivering its comparatively large nonstrategic nuclear arsenal is significant. Furthermore, Russian integrates its capabilities in large-scale military exercises.

This research suggests that much of the open-source analysis on Russian military doctrine is unnecessary. Small changes in Russian military doctrines serve as indicators of Russian military-political thinking but does not outline if, how, or when Russia intends to use nonstrategic nuclear weapons. The only key question is under what conditions does Russian military doctrine allow the use of nuclear weapons—a question answered by its current military doctrine which states "the decision to use nuclear weapons will be taken by the President of the Russian Federation." Further, official Russian statements often reflect the internal debate among Russian policy-makers and military officials. As this research illustrates, the views and opinions expressed by some officials are often excluded

²⁵⁴ The Embassy of the Russian Federation to the United Kingdom of Great Britain and Northern Ireland, "The Military Doctrine of the Russian Federation [2014]."

from Russia's military doctrine which is, after all, approved by the President of the Russian Federation. This research additionally illustrates that statements by Russian officials aimed at the international community may simply feed off of Westerners' inability to understand Russian nuclear strategy and in some cases were made only after a conflict ended.

E. FURTHER RESEARCH

Further research is needed to understand the role of Vladimir Putin in Russian nuclear decision-making. Since the fall of the Soviet Union, Russia has undergone many changes to its military doctrines, military reforms, and weapons capabilities. One could argue that the recent deployment of advanced, dual-capable delivery systems is the result of bureaucratic inertia within the Russian Federation. However, the one near-constant throughout all of Russia's military changes is Vladimir Putin.

Vladimir Putin, a former Lieutenant Colonel for the KGB, solidified his influence in Moscow under the Yeltsin administration in 1999—amplified by Putin's appointment as Prime Minister.²⁵⁵ Since 1999, Vladimir Putin has dominated Russia's decision-making as either Prime Minister or as President of the Russian Federation. According to Trenin, Vladimir Putin monopolizes control of diplomatic and military affairs (with some assistance from military advisors) within the Russian Federation.²⁵⁶ Further, Trenin suggests that Putin expressed a willingness to improve relations with Western states early in the 2000s but later turned bitter following Western decisions on missile defense and NATO expansion.²⁵⁷ More importantly, Trenin assesses Putin as a vanguard of conservative values, deeply religious, ambitious, self-conscientious, and an unwavering believer in Russia's sovereignty above all else.²⁵⁸ According the Trenin, Putin seeks a political equality with the United States/NATO and China and is further driven by a disdain

²⁵⁵ Steven Myers, *The New Tsar: The Rise and Reign of Vladimir Putin* (New York: Alfred A. Knopf, 2015), 44, 142, 151.

²⁵⁶ Dmitri Trenin, *Russia's Breakout from the Post-Cold War System: The Drivers of Putin's Course*, (Moscow: Carnegie Moscow Center, 2014), 7, https://carnegieendowment.org/files/CP_Trenin_Putin2014_web_Eng.pdf.

²⁵⁷ Trenin, Russia's Breakout from the Post-Cold War System: The Drivers of Putin's Course, 7–8.

²⁵⁸ Trenin, Russia's Breakout from the Post-Cold War System: The Drivers of Putin's Course, 9–13.

in progressive European values.²⁵⁹ Trenin submits that Putin is driven not by ideology but rather by a sense of loyalty to Russia.²⁶⁰

However, a closer analysis of Putin's personal beliefs may contribute to understanding the degree to which Russia (Putin) is committed to an "escalate to deescalate" strategy and more importantly, under what conditions Putin may authorize the use of nonstrategic nuclear weapons during a conflict. Additional analysis further contributes to the notion of *rational actor* assumptions made by key communities in the understanding of international relations.

F. IMPLICATIONS

U.S. Response

The Russian Federation's adoption of an "escalate to de-escalate" strategy has already forced analysts within the DoD to reassess defense needs in relation to Russia. Most proponents of the belief that Russia's possesses an escalatory strategy agree on proactive measures to counter Russian aggression. The 2018 NPR advocates for a "range of warhead yield options" and submits:

To correct any Russian misperceptions of advantage and credibly deter Russian nuclear or non-nuclear strategic attacks—which could now include attacks against U.S. NC3—the President must have a range of limited and graduated options, including a variety of delivery systems and explosive yields. These requirements put a premium on the survivability, flexibility and readiness of Western nuclear and non-nuclear capabilities to hold diverse types of Russian targets at risk throughout a crisis or conflict, and point to the continuing great value of the flexibility inherent in the combination of the U.S. nuclear triad, U.S. and other NATO non-strategic nuclear forces deployed in Europe, and the nuclear forces of our British and French allies.²⁶¹

Further, Colby's assessment in 2015 supports the conclusions of the 2018 NPR. Colby suggests that Russia maintains an advantage in that "it has capabilities to act at more

²⁵⁹ Trenin, Russia's Breakout from the Post-Cold War System: The Drivers of Putin's Course, 10, 15.

²⁶⁰ Trenin, Russia's Breakout from the Post-Cold War System: The Drivers of Putin's Course, 12.

²⁶¹ Department of Defense, *Nuclear Posture Review*, 31, 40.

and potentially more suitable echelons of the escalatory ladder."²⁶² According to Colby, NATO possesses the weapons to engage in a limited nuclear war but is unprepared to do so due to lack of planning for a conflict with Russia since the fall of the Soviet Union.²⁶³ Colby's answer to NATO's disadvantage is a NATO posture that demonstrates the ability and resolve to conduct limited nuclear war.²⁶⁴ Colby further submits that NATO should strengthen its conventional forces to bolster its deterrence message toward Russia.²⁶⁵

Some key issues arise with Colby's recommendations. NATO's increasing strength and political influence in the region is noted not only as a source of contention with Russia but also as a declared threat in its military doctrine. NATO activities that blatantly demonstrate the ability and willingness to conduct limited nuclear attacks are likely to trigger political escalation between the Russian Federation and the West. This, coupled with an increased conventional posture on Russia's periphery, sets the conditions for miscalculations and may even justify a preemptive strike by Russia under certain, misinterpreted circumstances.

Additionally, Colby recommends the development and deployment of new bombers, cruise missiles with varying nuclear yields, a nuclear-capable F-35 variant, and modifications to existing Trident missiles to support the delivery of lower-yield nuclear weapons.²⁶⁷ However, an abrupt focus on nuclear-capabilities may have the following negative effects: (1) undermine U.S. counterproliferation efforts with non-nuclear states while concurrently building nonstrategic nuclear capabilities; (2) result in an arms race or *security dilemma* between the U.S. and Russia; (3) compel China and North Korea to

²⁶² Colby, Countering Russian Nuclear Strategy in Central Europe.

²⁶³ Colby, Countering Russian Nuclear Strategy in Central Europe.

²⁶⁴ Colby, Countering Russian Nuclear Strategy in Central Europe.

²⁶⁵ Colby, Countering Russian Nuclear Strategy in Central Europe.

²⁶⁶ John Mearsheimer, "Why the Ukraine Crisis Is the West's Fault: The Liberal Delusions That Provoked Putin," *Foreign Affairs* 93, no. 5 (September/October 2045): 77–89, ProQuest; "Speech and the Following Discussion at the Munich Conference on Security Policy," President of Russia Official Web Portal, February 10, 2007, http://en.kremlin.ru/events/president/transcripts/24034; Myers, *The New Tsar: The Rise and Reign of Vladimir Putin*, 143.

²⁶⁷ Colby, Countering Russian Nuclear Strategy in Central Europe.

develop and deploy similar capabilities. While Colby's approach is not without logic, his strictly capabilities-based approach may produce unnecessary second or third order effects and does not address other potential strategy-based courses of action.

Others, on the other hand, offer a different recommendation that ultimately does not change current U.S. posture. According to Oliker and Baklitskiy, the United States maintains a superior conventional military and a "variety of nuclear options" that would deter any state from employing an escalatory strategy. However, Oliker and Baklitskiy only address the deterrence of an alleged escalatory Russian nuclear strategy and fail to address the second half of Russia's nuclear strategy. Provided that the Russian Federation assigns an additional, operational role for the use of nonstrategic weapons, Russia may be willing to move past an escalatory strategy and employ nonstrategic nuclear weapons against military targets to mitigate the U.S./NATO conventional advantage. In such a case, Colby may be more correct in his approach to counter Russian strategy.

This research acknowledges the limitations of open-source information but submits the following for moving forward with U.S. nuclear policy: The Department of Defense is correct that the Russian Federation possesses an "escalate to de-escalate" strategy. Furthermore, Russia assigns an operational role to its nonstrategic nuclear arsenal. The NPR and Colby are correct in that the United States must possess increased capabilities to match the nonstrategic nuclear capabilities of the Russian Federation. However, the U.S. must not associate these capabilities with NATO. Further, the United States must exercise restraint in the deployment of these systems to avoid a potential security dilemma or set the conditions for miscalculation/misinterpretation with the Russian Federation. As the United States pursues capability-based counters to Russia's nonstrategic nuclear threat, Western analysts' attention must shift toward strategic models of deterring conflict between nuclear capable states potentially willing to operationally employ nonstrategic nuclear weapons to achieve their ends.

²⁶⁸ Oliker and Baklitskiy, "The Nuclear Posture Review and Russian 'De-escalation:' A Dangerous Solution to a Nonexistent Problem."

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