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DETERRENCE IN THE DANGER ZONE: HOW THE UNITED STATES CAN DETER RUSSIAN GRAY ZONE CONFLICT

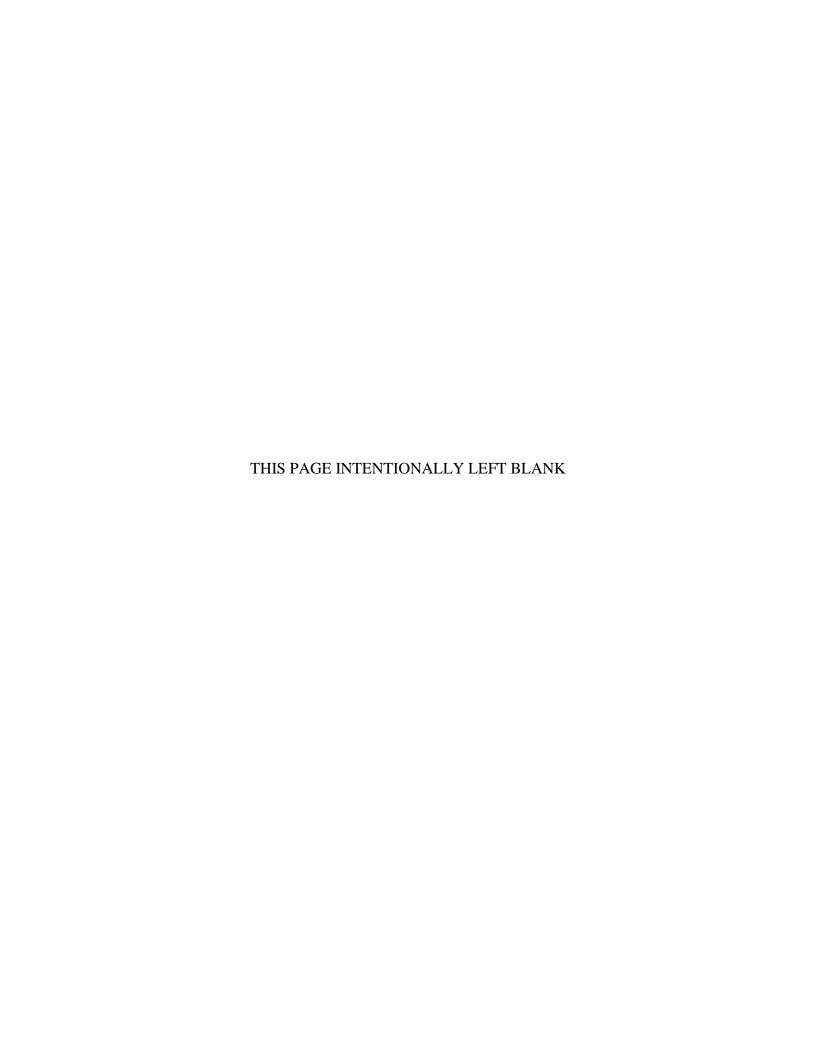
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In recent years, adversaries of the United States have become increasingly more adept at operating in the gray zone, which sits above normal statecraft and below armed conflict. In 2016, Russia used cyber-espionage and covert influence operations to sow discord among the American population and interfere in the democratic process of the U.S. presidential election. This attempt was but one part of a broader Russian gray zone strategy in which it uses non-military means to achieve its national objectives and gain influence while avoiding a powerful response from either the United States or NATO. In this sphere, non-democratic adversaries of the United States are at an advantage as they are often more agile and expeditious at integrating all elements of state power, especially economic power and informational warfare. This thesis draws on interviews with subject matter experts to explore how the United States can best deter these gray zone actions and strategies in the future. In doing so, it provides a strategic assessment of Russia as a state actor, U.S.—Russian relations, and Russia's use of the gray zone. Additionally, it analyzes the transposition of deterrence to the sub-conventional level. Finally, it illustrates ways in which the United States can deter parts of Russia's gray zone strategy. Overall, this research finds that it is difficult but possible to deter Russian gray zone conflict.

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DETERRENCE IN THE DANGER ZONE: HOW THE UNITED STATES CAN DETER RUSSIAN GRAY ZONE CONFLICT

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ABSTRACT

In recent years, adversaries of the United States have become increasingly more adept at operating in the gray zone, which sits above normal statecraft and below armed conflict. In 2016, Russia used cyber-espionage and covert influence operations to sow discord among the American population and interfere in the democratic process of the U.S. presidential election. This attempt was but one part of a broader Russian gray zone strategy in which it uses non-military means to achieve its national objectives and gain influence while avoiding a powerful response from either the United States or NATO. In this sphere, non-democratic adversaries of the United States are at an advantage as they are often more agile and expeditious at integrating all elements of state power, especially economic power and informational warfare. This thesis draws on interviews with subject matter experts to explore how the United States can best deter these gray zone actions and strategies in the future. In doing so, it provides a strategic assessment of Russia as a state actor, U.S.-Russian relations, and Russia's use of the gray zone. Additionally, it analyzes the transposition of deterrence to the sub-conventional level. Finally, it illustrates ways in which the United States can deter parts of Russia's gray zone strategy. Overall, this research finds that it is difficult but possible to deter Russian gray zone conflict.

TABLE OF CONTENTS

I.	INT	RODUCTION	1		
	A.	SIGNIFICANCE OF THE RESEARCH IN TODAY'S ENVIRONMENT	3		
	В.	RUSSIAN GRAY ZONE	5		
	C.	LITERATURE REVIEW	9		
		1. Deterrence	10		
		2. The United States and NATO	11		
		3. Russian Strategy	14		
	D.	POTENTIAL HYPOTHESES AND EXPLANATIONS	16		
	E.	RESEARCH DESIGN	16		
II.	RUSSIAN STRATEGIC ASSESSMENT AND USE OF THE GRAY				
	ZON A.	NEU.SRUSSIAN RELATIONS			
	A. B.	RUSSIAN STRATEGIC ASSESSMENT			
	Б. С.	A COMPARISON OF U.S. AND RUSSIAN STATE POWER			
	D.	CLARIFYING CONFLICT OR COMPETITION			
	D. Е.	RUSSIA'S GRAY ZONE STRATEGY IN CONTEXT			
	F.	CONCLUSION			
III.	DET	TERRENCE	40		
111.	A.	CORE DETERRENCE CONCEPTS			
	В.	THE COMPONENTS OF DETERRENCE			
	Б. С.	DETERRENCE APPROACHES			
	D.	RESIDUAL COLD WAR INFLUENCE			
	Б. Е.	THE EXTENSION OF DETERRENCE			
	12.	1. Nuclear Taboo			
		2. Stability–Instability Paradox			
		3. Extended Deterrence			
	F.	ADAPTING DETERRENCE TO NEW DEMANDS			
	1.	1. Conventional Deterrence as an Alternative to Classic	••••••		
		Deterrence	64		
		2. Applying Deterrence in the Context of Russian Behavior			
		3. Conventional and Cumulative Deterrence in the Gray			
		Zone	74		

IV.	DETERRING THE GRAY ZONE		
	A.		
		STRATEGY	80
		1. Shifting the Deterrent Mindset	81
		2. Communication	82
		3. Diplomacy	90
	В.	SUB-CONVENTIONAL DETERRENCE	100
		1. Sub-conventional Deterrence by Denial	101
		2. Sub-conventional Deterrence by Punishment	121
	C.	CONVENTIONAL ESCALATION TO RESTORE	
		DETERRENCE	128
V.	CO	NCLUSION	131
	A.	SIGNIFICANT FINDINGS	
	В.	POLICY IMPLICATIONS	136
	C.	LIMITATIONS AND OBSTACLES	137
	D.	OPPORTUNITIES FOR FUTURE RESEARCH	139
APP	ENDIX	X A. INTERVIEWEES	145
APP	ENDIX	X B. INTERVIEW QUESTIONS	147
LIST	OF R	REFERENCES	153
INIT	TAI. D	DISTRIBUTION LIST	160

LIST OF FIGURES

Figure 1. U.S.–Russian Stab	lity Relationship	70
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LIST OF TABLES

Table 1. Leve	els of Gray Zone	Activities1	23	3
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LIST OF ACRONYMS AND ABBREVIATIONS

A2AD anti-access and area denial CIA Central Intelligence Agency

CSIS Center for Strategic and International Studies

DIME diplomatic, information, military, and economic

EU European Union

INF Intermediate-Range Nuclear Forces (Treaty)

ISIL Islamic State of Iraq and the Levant

MCDC Multinational Capability Development Campaign

NATO North Atlantic Treaty Organization

New START New Strategic Arms Reduction Treaty

NPT Nuclear Non-Proliferation Treaty

NRC NATO-Russia Council

OSCE Organization for Security and Cooperation in Europe

SHAPE Supreme Headquarters Allied Powers Europe

VJTF Very High Readiness Joint Task Force

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I. INTRODUCTION

How can the United States deter Russian gray zone conflict—conflict that exists at a level below general war? The 2017 United States *National Security Strategy* designates China and Russia as principal priorities, and the 2018 *National Military Strategy* places new emphasis on diffusion and competition, shifting priorities away from counterterrorism and onto great power competition. These strategic shifts demand an examination of the way the United States and Russia interact in competition to achieve their political aims, including deterrence of gray zone conflict. To understand this context, it is critical also to understand the relationship between the United States and Russia and how that relationship influences both states' policy and strategy. Western analysts have focused primarily on Russia's "escalate to de-escalate" strategy. However, they have failed to adequately address the full scope of Russia's strategic posture and ability to engage in operations below the threshold of conflict, which scholars divergently describe in several ways: as hybrid warfare, a short-of-war strategy, new-generation warfare, or gray zone conflict.

Russia recognizes that multiple levels of conflict exist before reaching a threshold beyond which they are outmatched politically and militarily by the United States and the North Atlantic Treaty Organization (NATO).² Russian strategy and operations, therefore, integrate conventional and non-military means to achieve their strategic objectives while pulling back from actions that would initiate a strategic or conventional military response from the United States. Russian strategic objectives include weakening the cohesion of the NATO alliance to diminish U.S. involvement and gain leverage in Europe.³

¹ Donald Trump, *National Security Strategy* (Washington, DC: White House, December 2017), https://www.whitehouse.gov/wp-content/uploads/2017/12/NSS-Final-12-18-2017-0905.pdf; Joint Chiefs of Staff, *Description of the National Military Strategy 2018* (Washington, DC: Joint Chiefs of Staff, 2018), 3, https://www.jcs.mil/Portals/36/Documents/Publications/UNCLASS_2018_National_Military_Strategy_Description.pdf.

² Dave Johnson, *Russia's Conventional Precision Strike Capabilities, Regional Crises, and Nuclear Thresholds*, Livermore Papers on Global Security, no. 3 (Livermore, CA: Lawrence Livermore National Laboratory, February 2018), https://cgsr.llnl.gov/content/assets/docs/Precision-Strike-Capabilities-report-v3-7.pdf.

³ Elbridge Colby and Jonathan Solomon, "Facing Russia: Conventional Defence and Deterrence in Europe," *Survival* 57, no. 6 (2015), https://doi.org/10.1080/00396338.2015.1116146.

The scholarship on how to deter gray zone conflict is limited in scope and emergent, which introduces critical discussions into the literature without anchoring those ideas to the practicality of transposing deterrence theory to the sub-conventional level. The literature also fails to agree on terminology for Russia's aggressive actions below the threshold of general war, which has the potential to cause misinterpretation and a failed analysis.⁴

For this research, a series of interviews was conducted with the leading subject matter experts in deterrence, U.S. and NATO strategy, and Russian strategy. The interviewees were as follows: retired U.S. Army general and former director of the Central Intelligence Agency (CIA), David Petraeus; former secretary of defense, White House chief of staff, and director of the CIA, Leon Panetta; director of the Center for Global Security Research at Lawrence Livermore National Laboratory and former deputy assistant secretary of defense for nuclear and missile defense policy, Dr. Brad Roberts; director of the Russia Studies Program at the Center for Naval Analyses, Mr. Michael Kofman; nonresident senior fellow in the Arms Control and Non-Proliferation Initiative and the Center on the United States and Europe at the Brookings Institution, Mr. Steven Pifer; the Arleigh A. Burke chair in strategy at the Center for Strategic and International Studies (CSIS), Mr. Anthony Cordesman; senior political scientist at the RAND Corporation, Dr. Michael Mazarr; retired U.S. Army lieutenant general and former ambassador and United States permanent representative to the North Atlantic Council, Dr. Douglas Lute; and senior fellow emeritus at Stanford University's Freeman Spogli Institute of International Studies, Dr. David Holloway.

Each subject matter expert was interviewed on the subjects of Russian strategic analysis, U.S.–Russian relations, their understanding of the gray zone and how it is defined, the best and worst strategies to deter gray zone activities, extended deterrence, and additional insight as they saw fit. The Naval Postgraduate School provided a unique opportunity to conduct interviews with these subject matter experts by capitalizing on

⁴ Andrew Radin and Raphael S. Cohen, "Russia's Soft Strategy to Hostile Measures in Europe," War on the Rocks, February 26, 2019, https://warontherocks.com/2019/02/russias-soft-strategy-to-hostile-measures-in-europe/.

access to resources, personnel, and locations, such as Lawrence Livermore National Laboratory and Middlebury Institute, which no other institution could provide. Overall, this research provides a clear understanding of the current political environment between the United States and Russia, a comprehensive strategic assessment of Russia, an analysis of the ability to transpose deterrence to the sub-conventional level, and deterrence strategy recommendations—ultimately providing a renewed perspective on the way forward for U.S. and deterrence strategy.

A. SIGNIFICANCE OF THE RESEARCH IN TODAY'S ENVIRONMENT

Since its inception in 1949 and through the Cold War, the collective international security demonstrated by the United States and NATO has been a stabilizing force in world politics and a significant factor in U.S. extended deterrence credibility.⁵ Recently, the Ukrainian crisis has raised questions about the ability of the United States to deter Russia and prevent escalation in the region that would threaten NATO states and U.S. national interests. A credible U.S. deterrence at the sub-conventional level is essential to the maintenance of the international security establishment, U.S. strategic interests, and the strength of the NATO alliance.

After the Cold War and the fall of the Soviet Union, both the United States and NATO de-emphasized deterrence as the threats to NATO weakened, and the United States prioritized terrorism over great power competition. Today, the threat environment has shifted back to great power competition with threats on multiple fronts and levels of conflict. The current security environment is more complex than that of the Cold War era, and thus, the United States can no longer rely on the ideas of mutually assured destruction or strategic nuclear parity. Today's strategic environment is characterized by conflict below the level of conventional armed conflict, and the U.S. deterrent policy should address each level of warfare from nuclear, to conventional, to sub-conventional if the United States hopes to compete.

⁵ "Why Was NATO Founded?," North Atlantic Treaty Organization, accessed February 18, 2020, https://www.nato.int/wearenato/why-was-nato-founded.html.

Not only has the need for a credible deterrent to our adversaries and allies resurfaced, but it has also evolved past deterring strategic nuclear strikes and massive conventional warfare. Denial-of-services attacks in Estonia in 2007, Georgia in 2008, the annexation of Crimea in 2014, and meddling in the 2016 U.S. presidential election demonstrate this new security environment and the threat Russia poses to the stability and credibility of U.S. deterrence. It has become critical to deter conflict short of general war, in multiple domains, at lower levels of conflict, simultaneously against multiple adversaries with varying capabilities and intentions.

Many worry that authoritarian competitors such as Russia are "seeking regional hegemony and the means to project power globally [by] . . . pursuing determined military buildups aimed at neutralizing U.S. strengths through gray-zone aggression—intimidation and coercion in the space between war and peace." These trends have created a crisis for U.S. national security that leaders have addressed with policies such as the 2018 *National Defense Strategy* and the 2018 *Nuclear Posture Review*. These documents detail U.S. strategy and policy for the deterrence of such trends, but still, "across Eurasia, gray zone aggression is steadily undermining the security of U.S. allies and partners and eroding American influence."

The United States has recognized the need for complex, flexible, and tailored deterrence in the most recent strategies. The question of whether the United States can deter Russian gray zone conflict that takes place at the sub-conventional level is crucial to U.S. decision-making and response in a time of potential crisis. The United States cannot simply rest on the declared policy and recognition that new deterrence capabilities are required; it is necessary to examine what portions of Russian gray zone activity need to be

⁶ Steven Pifer, "Five Years after Crimea's Illegal Annexation, the Issue Is No Closer to Resolution," Brookings Institution, March 18, 2019, https://www.brookings.edu/blog/order-from-chaos/2019/03/18/five-years-after-crimeas-illegal-annexation-the-issue-is-no-closer-to-resolution/; Kristin Ven 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/.

⁷ National Defense Strategy Commission, *Providing for the Common Defense* (Washington, DC: United States Institute for Peace, 2018), v, https://www.usip.org/sites/default/files/2018-11/providing-for-the-common-defense.pdf.

⁸ National Defense Strategy Commission, v.

deterred, what elements of deterrence can be adapted to the sub-conventional level, how Russia is strategically assessed, and what particular components of state power are necessary for a successful deterrence strategy at a level short of war. Failure to do so risks the misunderstanding of not only U.S. capabilities for deterrence but also the capabilities and will of our adversaries, creating the potential for unnecessary escalation, tactical nuclear use, and great power war. Evaluating the capabilities of the United States and NATO to support their declared strategy enables policymakers to allocate funding, resources, and attention to the identified gaps, further bolstering the credibility and strength of their deterrence.

B. RUSSIAN GRAY ZONE

A solid understanding of the Russian gray zone—and what it does and does not include—is required to assess how Russia uses gray zone strategy and how the United States can deter it. The literature and interviews of subject matter expert establish that Russia's perspective and relative standing influence its use of the gray zone as it aims to achieve national objectives from a position of weakness outside its regional "near abroad." This section relies heavily on interviews as the author asked each interviewee to define gray zone conflict as well as describe what it does and does not include. These responses were compared to existing definitions of the gray zone in the literature to shape a working definition.

Generally accepted examples of Russian gray zone conflict include events in Crimea and eastern Ukraine, cyberattacks and the invasion of Georgia, Russian proxy forces in Syria, cyber-meddling in democratic elections, and disinformation campaigns. However, agreeing on these examples does not in itself provide a clear and concise definition of the term. Walker Conner says, "The meaning of a word is defined by its limits, by knowing what does not belong under it as clearly as what does. Any word that could include everything and anything has no place in science (even social science)." So, what

⁹ Walker Connor, *Ethnonationalism: The Quest for Understanding* (Princeton: Princeton University Press, 1994), 92, Google Books.

exactly does gray zone conflict in the Russian context mean, and what do those specific words define and encompass?

Even though the term *gray zone* is considered emergent, the concept is not new. George Kennan's description of political warfare in 1948—"the employment of all the means at a nation's command, short of war"—essentially describes today's concept of gray zone conflict. ¹⁰ This definition is accurate; however, a new distinction between Kennan's form of political warfare and today's gray zone conflict is needed. Nevertheless, his definition is a blunt reminder that that gray zone conflict is not a new occurrence. Writing in 1948, though, Kennan could never have imagined all the advancements in technology, access to information, social media platforms, and other factors that boost the effectiveness of political warfare or gray zone tactics today.

Multiple scholars have attempted to capture the essence of Kennan's concept in a definition that reflects today's complex environment. Michael Mazarr, for example, defines the gray zone as "employing sequences of gradual steps to secure strategic leverage. The efforts remain below thresholds that would generate a powerful U.S. or international response, but are forceful and deliberate, calculated to gain measurable traction over time." The gray zone has also been characterized by "intense political, economic, informational, and military competition more fervent in nature than normal steady-state diplomacy, yet short of conventional war." Others, such as David Barno and Nora Bensahel, have described gray zone conflicts as "involving some aggression or use

¹⁰ George F. Kennan, "The Inauguration of Organized Political Warfare [Redacted Version]" (official memorandum, Washington, DC: National Security Council, April 30, 1948), 1, https://digitalarchive.wilsoncenter.org/document/114320.pdf?v=941dc9ee5c6e51333ea9ebbbc9104e8c.

¹¹ Michael Mazarr, *Mastering the Gray zone: Understanding a Changing Era of Conflict* (Carlisle, PA: Strategic Studies Institute, 2015), 1–2, https://www.globalsecurity.org/military/library/report/2015/ssi_mazarr 151202.pdf.

¹² Frank G. Hoffman, "Examining Complex Forms of Conflict: Gray Zone and Hybrid Challenges," *Prism* 7, no. 4 (2018): 35–36, https://cco.ndu.edu/Portals/96/Documents/prism/prism7_4/181204_ Hoffman_PDF.pdf?ver=2018-12-04-161237-307. See also Joseph L. Votel, "Statement before the House Armed Services Committee Subcommittee on Emerging Threats and Capabilities," House of Representatives, March 18, 2015, https://docs.house.gov/meetings/AS/AS26/20150318/103157/HMTG-114-AS26-Wstate-VotelUSAJ-20150318.pdf; Philip Kapusta, *The Gray Zone* (Washington, DC: Special Operations Command, September 9, 2015), https://www.soc.mil/swcs/ProjectGray/Gray%20Zones%20-%20USSOCOM%20White%20Paper%209%20Sep%202015.pdf.

of force, but in many aspects, their defining characteristic is ambiguity—about the ultimate objectives, the participants, whether international treaties and norms have been violated, and the role that military forces should play in response."¹³ When interviewed, Michael J. Mazarr, senior political scientist at the RAND Corporation, reiterated that gray zone operations are not new; however, the differences today stem from changes in the political environment and technological advantages:

A combination of escalatory risks, nuclear and otherwise, economic interdependencies, and the existence of an international community that is built around certain kinds of norms that even Russia does not want to dramatically depart from creates an environment in which great powers have a significant, and even unprecedented appetite to achieve their goals short of large-scale war. In some cases, countries [Russia] develop entire doctrines and concepts around this and then design campaigns in which they assemble a number of these [gray zone] tools to achieve its goals. 14

When asked, almost every subject matter expert noted that the gray zone includes cyber, information operation campaigns, and election meddling and is almost always shrouded in ambiguity, giving Russia plausible deniability for its actions. Fewer, but still a significant number of participants, referenced actions such as proxy forces, clandestine forces and operations, democratic interference or degradation, and energy intimidation. ¹⁵ Based on the thematic consensus among the current literature and interviewees, for this thesis, Russian gray zone conflict is defined as follows:

Any actions above the level of normal statecraft that remain below the threshold of state-sponsored armed conflict, focus on gaining strategic leverage, and are characterized by ambiguity, intense political, economic, and informational competition that could involve aggression, the use of ambiguous force, or the incitement of violence.

Dr. Douglas Lute, retired U.S. Army lieutenant general and former ambassador and United States permanent representative to the North Atlantic Council, describes this strategy as

¹³ David Barno and Nora Bensahel, "Fighting and Winning in the 'Gray Zone," War on the Rocks, May 19, 2015, https://warontherocks.com/2015/05/fighting-and-winning-in-the-gray-zone/.

¹⁴ Mr. Anthony Cordesman (the Arleigh A. Burke chair in strategy at the Center for Strategic and International Studies), interview with author, November 7, 2019; Dr. Michael Mazarr (senior political scientist at the RAND Corporation), interview with author, December 17, 2019.

¹⁵ See Appendix A.

"sub-Article 5 warfare" in reference to Article 5 of the North Atlantic Treaty, which authorizes the full weight of NATO and all of its nations to respond to an armed attack against one of its members. ¹⁶ The sub-Article 5 strategy is designed to obscure and obfuscate Russian activities to slow NATO decision-making and create facts on the ground advantageous to Russia. ¹⁷ This strategy furthers Russia's national security priorities without triggering NATO's Article 5 or other dramatic and costly responses from the United States.

Actions on the high and low ends of the conflict spectrum are not part of the gray zone. The interviews conducted for this research contributed an unprecedented discussion about what falls outside the gray zone, which affords a better understanding of the space and how to deter such actions. Mazarr described actions at the high end of the spectrum not included in the gray zone as the use of large-scale military force or large-scale conflict, even if it is limited war. ¹⁸ On the low end of the spectrum, Mazarr described actions such as sustaining relations with partners and allies, general diplomacy, and standard maintenance of economic relations as actions not included in the gray zone. ¹⁹ Mazarr also acknowledged that gray zone parameters are still a matter of opinion and difficult to detail, but suggested that actions such a classic geopolitical maneuvering and intervening in local conflicts for relative advantage are related to but separate from gray zone campaigns. Overall, Mazarr summarized the gray zone spectrum as any actions above statecraft and below open conflict that are focused on direct competition with peer or near-peer competitors. ²⁰

Lute expounded on these examples by detailing uniformed armed forces, nuclear threats, overt military operations, overt military exercises, and military campaigns and

¹⁶ Dr. Douglas Lute (retired U.S. Army lieutenant general and former ambassador and United States permanent representative to the North Atlantic Council), interview with author, November 26, 2019.

¹⁷ Lute, interview with author.

¹⁸ Mazarr, interview with author, December 17, 2019.

¹⁹ Mazarr, interview with author.

²⁰ Mazarr, interview with author.

maneuvers as outside the gray zone.²¹ Overall, the consensus among the interviewees can be summarized by General David Petraeus's description of "conventional force employment" and Steven Pifer's "attributable kinetic activity" as the overarching attributes that mark actions outside the gray zone.²²

C. LITERATURE REVIEW

This literature review surveys and assesses the state of the existing body of literature on the theory of deterrence, the significance of the U.S.–Russian relationship on deterrence, the ability to transpose deterrence to the sub-conventional level, Russian strategy, and current deterrence strategy at the sub-conventional level. The literature is thinner and less developed on the U.S. ability to enact deterrence strategies as well as threats to adversaries at the sub-conventional level where gray zone conflict exists. In fact, the literature on Russian aggression, behavior, and policy suggests that Russia is looking to take advantage of a potentially weakened deterrence commitment by NATO to extend its influence further into Eurasia, not to mention a weak U.S. deterrence strategy at the sub-conventional level.²³

Much debate remains regarding the credibility of the deterrence strategies of the United States at the lower levels of conflict, and scholars disagree on how to deter Russian aggression and, further, what means are available to do so. There also seems to be a lack of consensus on Russia's current strategy. Critically, these knowledge gaps suggest deterrence weakness even when Russian actions directly threaten NATO member states and U.S. interests. Scholar Kristin Ven Bruusgaard asserts, "NATO's inability to defend

²¹ Lute, interview with author, November 26, 2019.

²² David Petraeus (retired U.S. Army general and former director of the Central Intelligence Agency), interview with author, October 31, 2019; Mr. Steven Pifer (nonresident senior fellow in the Arms Control and Non-Proliferation Initiative and the Center on the United States and Europe at the Brookings Institution), interview with author, October 25, 2019.

²³ Katarzyna Zysk, "Escalation and Nuclear Weapons in Russia's Military Strategy," *Royal United Services Institute Journal* 163, no. 2 (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 (2018): 186–190, https://doi.org/10.1080/00963402.2018.1462912; Nikolai N. Sokov, "Why Russia Calls a Limited Nuclear Strike 'De-Escalation,'" Bulletin of the Atomic Scientists, March 13, 2014, https://the bulletin.org/2014/03/why-russia-calls-a-limited-nuclear-strike-de-escalation/.

the Baltics along with Russia's improved military capabilities provide a tempting opportunity to attempt nuclear blackmail against the alliance."²⁴ Further, Alexey Arbatov et al. point to entanglement and doctrinal developments by Russia and the United States as "giving rise to the risk that a non-nuclear conflict—even a local one—might escalate rapidly and unintentionally into a global nuclear war."²⁵

Scholars and analysts have only minimally addressed the gap in applying deterrence strategy to the gray zone; however they have noted that "the short-of-war strategy employed by Russia is undermining the deterrence of U.S. adversaries and the confidence of American allies, thus increasing the likelihood of military conflict."²⁶ Deterrence is a critical and enduring U.S. national objective. The U.S. National Defense Strategy prioritizes deterrence of all types of attack and the assurance of U.S. allies and partners.²⁷ Given these priorities, it was imperative that this thesis explored the ability of the United States to deter adversarial actions, specifically Russian actions, at the sub-conventional level.

1. Deterrence

The 2018 *Nuclear Posture Review* states, "The highest U.S. nuclear policy and strategy priority is to deter potential adversaries from nuclear attack of any scale." ²⁸ Given the diverse threats posed by a Russian strategy that integrates tactical nuclear weapons at some of the lowest levels of war, U.S. deterrent strategy will play a critical role in national security. ²⁹ To understand this critical role and properly assess how the United States and

²⁴ Ven Bruusgaard, "The Myth of Russia's Lowered Nuclear Threshold."

²⁵ Alexey Arbatov et al. *Entanglement: Russian and Chinese Perspectives on Non-Nuclear Weapons and Nuclear Risks*, ed. James M. Acton (Washington, DC: Carnegie Endowment for International Peace, 2017), 1, https://carnegieendowment.org/files/Entanglement_interior_FNL.pdf.

²⁶ National Defense Strategy Commission; *Providing for the Common Defense*, v.

²⁷ Department of Defense, *National Defense Strategy* (Washington, DC: Department of Defense, 2018), https://dod.defense.gov/Portals/1/Documents/pubs/2018-National-Defense-Strategy-Summary.pdf; National Defense Strategy Commission, *Providing for the Common Defense*.

²⁸ Department of Defense, *Nuclear Posture Review* (Washington, DC: Department of Defense, 2018), VII, https://media.defense.gov/2018/Feb/02/2001872886/-1/-1/1/2018-NUCLEAR-POSTURE-REVIEW-FINAL-REPORT.PDF.

²⁹ Johnson, Russia's Conventional Precision Strike Capabilities.

NATO will deter Russian aggression, a foundational understanding of deterrence is required. Many respected authors, such as Thomas Schelling, Scott Sagan, Richard Betts, Bernard Brodie, and Glenn Snyder, provide an extensive theoretical framework of deterrence necessary for this research.³⁰ Particularly relevant to the issue is the literature focused on extended deterrence, which considers the will and credibility of deterrence threats that Russian actions have called into question. Other authors, including Brad Roberts, Alexey Arbatov, Robert Powell, Francis Gavin, and Keir Lieber, provide an assessment of deterrence throughout history and today, providing context to the theoretical understanding of deterrence theory.³¹

2. The United States and NATO

The majority of the literature written on the current U.S. and NATO deterrence strategy is descriptive, detailing the specifics of the document in factual language devoid of any analytical assessment. These pieces of literature, including the *National Security Strategy*, *National Defense Strategy*, *Nuclear Posture Review*, and NATO charter, and articles by authors such as Adam Mount and Anna Péczeli are fundamental to the understanding of the change in strategy; however, they provide little in the way of how to adapt deterrence to the sub-conventional level.³² The national security documents detail the new strategies and highlight the threat of great power competition, including Russia,

³⁰ Thomas Schelling, *Arms and Influence* (New Haven, CT: Yale University Press, 1966); Richard Betts, *Nuclear Blackmail and Nuclear Balance* (Washington, DC: Brookings Institution, 1987); Bernard Brodie, *The Atomic Bomb and American Security* (New Haven, CT: Yale Institute of International Studies, 1945); Glenn Snyder, *Deterrence and Defense: Toward a Theory of National Security* (Princeton: Princeton University Press, 1961).

³¹ Brad Roberts, *The Case for Nuclear Weapons in the 21st Century* (Stanford: Stanford University Press, 2016); Alexey Arbatov, "Nuclear Deterrence: A Guarantee or Threat to Strategic Stability?," Carnegie Moscow Center, March 22, 2019, https://carnegie.ru/2019/03/22/nuclear-deterrence-guarantee-or-threat-to-strategic-stability-pub-78663; Kier Lieber and Daryl G. Press, "The New Era of Nuclear Weapons, Deterrence and Conflict," *Strategic Studies Quarterly* 7, no. 1 (Spring 2013), https://www.jstor.org/stable/26270573?seq=1#metadata info tab contents.

³² Anna Péczeli, "The Trump Administration's Nuclear Posture Review: Back to Great Power Competition," *Journal for Peace and Nuclear Disarmament* 1, no. 2 (2018): 238–255, https://doi.org/10.1080/25751654.2018.1530741; Adam Mount, "Trump's Troubling Nuclear Plan: How It Hastens the Rise of a More Dangerous World," *Foreign Affairs*, February 2, 2018, https://www.foreignaffairs.com/articles/2018-02-02/trumps-troubling-nuclear-plan.

while Anna Péczeli argues that the *Nuclear Posture Review* hastens the rise toward a more dangerous world of nuclear competition by failing to lay out a plan for the new strategies.

The experts that do offer analytical assessments address the need to adapt deterrence strategies to a changing security environment, evaluate the needed level of deterrence, share perspectives on strategic deterrence continuity, explain domestic and foreign reactions to the new strategy, and identify implications for the nuclear enterprise.³³ This pool of literature also highlights that the diverging "perceptions of Russia as a military threat following the Ukrainian crisis differ sharply across Europe and appear to be heavily influenced by geographical proximity to Russia."³⁴ This variation is particularly relevant in discussing deterrence as a whole as it challenges the implementation of a deterrence strategy against Russia if the United States and its partners cannot agree on what is a threat that needs to be deterred. What this body of work does not address is the ability, or lack thereof, to successfully adapt deterrence and apply it at the sub-conventional level.

Another category of literature that discusses the need for the United States to deter aggression short of general war is limited and fails to address how a deterrent strategy would be implemented. Literature such as *NATO's Return to Europe* edited by Rebecca Moore and Damon Coletta, the report by the National Defense Strategy Commission, and the annotated bibliography by Jacek Durkalec et al. are examples of seminal works in this space. ³⁵ The National Defense Strategy Commission's report assesses the national strategy and recognizes that "America's military superiority—the hard-power backbone of its global influence and national security—has eroded to a dangerous degree. Rivals and

³³ Karen Miller et al., "Strategic Weapons in the 21st Century: Understanding the New U.S. Policy Context" (presentation, Los Alamos National Laboratory, Washington, DC, March 17, 2018), https://cgsr.llnl.gov/content/assets/docs/SW21_2018_Report.pdf; Jacek Durkalec et al., "'Compete, Deter, and Win' in a Trans-Regional Perspective: On Meeting the New Challenges of Extended Deterrence" (Livermore, CA: Lawrence Livermore National Laboratory, 2019), https://cgsr.llnl.gov/content/assets/docs/ED_Bibliography_FEB2019_Final.pdf.

³⁴ Stephanie Pezard et al., *European Relations with Russia: Threat Perceptions, Responses, and Strategies in the Wake of the Ukrainian Crisis* (Santa Monica, CA: RAND Corporation, 2017), X, https://www.rand.org/pubs/research_reports/RR1579.html.

³⁵ Rebecca Moore and Damon Coletta, ed., *NATO's Return to Europe* (Washington, DC: Georgetown University Press, 2017); National Defense Strategy Commission, *Providing for the Common Defense*; Durkalec et al., "'Compete, Deter, and Win'"; Guillaume Lasconjarias and Jeffrey Larsen, "NATO Responses to Hybrid Threats," NDC, Dec 2014.

adversaries are challenging the United States on many fronts and in many domains. America's ability to defend its allies, its partners, and its vital interests is increasingly in doubt."³⁶ The report goes on to claim that "if the nation does not act promptly to remedy these circumstances, the consequences will be grave and lasting."³⁷ The report is a sobering call for change, but it does not explain how to implement such change successfully.

The pool of literature that does address how to implement the current deterrence strategy against a threat like Russia's short-of-war strategy is limited and sometimes vague. Authors like Rebecca Moore, Stephen Cimbala, Steven Pifer, Jacek Durkalec, Oleksandr Shykov, Guillaume Lasconjarias, Jeffrey Larsen, and Brad Roberts identify challenges to U.S. deterrence, the need to strengthen alliances and extended deterrence based on the new environment of strategic competition and modern war, attitudes of ambivalence toward extended deterrence, and the potential hesitancy of NATO members to use force to defend their allies.³⁸ This literature also examines deterrence through a regional perspective through the lens of executing the current U.S. strategy of "compete, deter, and win" laid out in the *National Defense Strategy*. ³⁹ The challenges to U.S. deterrence along with Russia's increasing attempts to push the limits of the gray zone demand further research into the U.S. ability to deter Russian aggression squarely in the center of national security rhetoric. This literature builds an understanding of the policy, strategy, strategic environment, and challenges to U.S. deterrence and offers a launching point into literature that juxtaposes U.S. deterrence strategy against Russia's short-of-war strategy and the challenges it creates.

³⁶ National Defense Strategy Commission, *Providing for the Common Defense*.

³⁷ National Defense Strategy Commission.

³⁸ Schuyle Foerster, "NATO's Return: Implications for Extended Deterrence," in *NATO's Return to Europe*, ed. Rebecca Moore and Damon Coletta (Washington, DC: Georgetown University Press, 2017), 45–70; David Trachtenberg, "US Extended Deterrence How Much Strategic Force Is Too Little?" *Strategic Studies Quarterly* 6, no. 2 (Summer 2012), https://www.jstor.org/stable/26270524.

³⁹ Durkalec et al., "Compete, Deter, and Win."

3. Russian Strategy

The literature written on Russian strategy is disjointed and on occasion fails to consider how the Russian approach to strategy has evolved considerably over the last decade, including the ways of defining war, conflict, and escalation. This lack of cohesive terminology from both Western assessments and Russian doctrine creates a disconnect among sources, which compounds the perplexity. Scholars have identified within Russian doctrine tension between the strategic aim of avoiding general war and the strategic aim to overturn the post–Cold War order through coercion and gray zone tactics. ⁴⁰ This tension is only exacerbated by the perpetual blurring of lines that separate a posture of peace and a state of war. ⁴¹ Russian strategy simultaneously "threatens and exercises limited nuclear first use" while attempting to achieve national objectives without direct military conflict. ⁴² This desire to avoid direct military conflict at the conventional level leads Russia to operate at the sub-conventional level of the gray zone.

Although there are multiple sources on Russian doctrine, this research utilized Dave Johnson's white paper, *Russia's Conventional Precision Strike Capabilities, Regional Crises, and Nuclear Thresholds*, in conjunction with original Russian doctrine, speeches, and articles published by President Vladimir Putin or his administration, and the interviews of subject matter experts as a framework to discuss Russian strategy. ⁴³ Johnson asserts that the Russian strategy defines war as "an armed struggle" and further categorizes it depending on the scale and intensity, including large, regional, and local scale at the level of low, medium, and high intensity. ⁴⁴ These classification levels allow Russia to prepare its forces accordingly; for example, the annexation of Crimea is a low-intensity operation,

⁴⁰ Nikolai N. Sokov, "The Role of Nuclear and Advanced Conventional Weapons in Russian Containment Strategy" (lecture, Naval Postgraduate School, Monterey, CA, April 2019).

⁴¹ Sokov, "The Role of Nuclear and Advanced Conventional Weapons"; Johnson, *Russia's Conventional Precision Strike Capabilities*.

⁴² Department of Defense, Nuclear Posture Review, 30.

⁴³ Russia Insight, "Putin on Russia-US Relations Deteriorating: It All Started with NATO Bombing of Serbia/Yugoslavia," October 29, 2016, YouTube, video, 3:10, https://www.youtube.com/watch?v=C_TXZXtKU_k; Vladimir Putin, "Russia and the Changing World," Embassy of the Russian Federation to the United Kingdom, press release, February 27, 2012, https://rusemb.org.uk/press/612.

⁴⁴ Johnson, Russia's Conventional Precision Strike Capabilities, 14.

and until Russian-designated military entered the state, it was at the sub-conventional level below armed conflict. As Russian strategy also delineates three different types of conflict: local, regional, and strategic. Russia extends its nuclear capabilities down to the regional conflict level, causing issues of inadvertent escalation to a greater level of war. Urrent Russian doctrine does not see the use of tactical nuclear weapons at the level of local or regional conflict as crossing the nuclear threshold or breaking the nuclear taboo. Rather, it views these low-yield tactical nuclear weapons as just another tool in the arsenal and freely integrates them into lower levels of conflict. Russia assesses war with NATO and its allies short of general war as a regional conflict, which includes the possibility of limited tactical nuclear use. Western analysts have used such labels as escalate-to-deescalate, escalation dominance, short of war, and hybrid warfare for Russian strategy, but Russian officials have labeled it "new forms of armed conflict" or "non-military means." Increasingly, the term gray zone aggression or gray zone conflict appears in the literature, which is the term this research uses.

According to the Department of Defense, effective U.S. deterrence requires that the adversary sees "no possible benefits from non-nuclear aggression." ⁵² As such, interviews with subject matter experts in Russian strategy assisted in identifying Russian strategy, antagonism, and strategic thought as a state actor on which U.S. deterrence strategy at the sub-conventional level can be developed.

⁴⁵ Johnson.

⁴⁶ Johnson.

⁴⁷ Mikhail Tsypkin, "Limited Nuclear Conflict and Escalation Control in Russian Military Strategy" (presentation, Naval Postgraduate School, September 16, 2018), 26.

⁴⁸ Zysk, "Escalation and Nuclear Weapons in Russia's Military Strategy"; Sokov, "Why Russia Calls a Limited Nuclear Strike 'De-Escalation."

⁴⁹ Department of Defense, *Nuclear Posture Review* (2018).

⁵⁰ Bruce McClintock and Andrew Radin, "Russia in Action, Short of War" *RAND Blog*, May 9 2017, https://www.rand.org/blog/2017/05/russia-in-action-short-of-war.html.

⁵¹ Johnson, Russia's Conventional Precision Strike Capabilities, 21.

⁵² Department of Defense, *Nuclear Posture Review* (2018), VII.

D. POTENTIAL HYPOTHESES AND EXPLANATIONS

Based on the literature review and interviews with subject matter experts, no comprehensive hypothesis for how the United States and NATO can deter Russian aggression short of war exists in the current literature. What have emerged are three overarching themes. First is the shift in the threat environment away from terrorism and toward great power competition, requiring reimagined deterrent strategies tailored for specific threats. Second is the suggestion that the deterrence credibility of the United States and NATO has deteriorated since the end of the Cold War. The research shows that this is a concern, but U.S. extended deterrence has been assessed as credible and effective as of today. Third is that Russia is utilizing a strategy short of general war that complicates the U.S. deterrence strategy. The literature also reveals ideas for the United States and NATO to improve deterrence overall and possibly assist in deterring Russian aggression. These explanations include bolstering deterrence through reinforced and reinvigorated conventional capabilities in both the United States and NATO, improving communication and diplomatic relations with Russia, and improving U.S. resilience and information operations. Overall, the literature recognizes that U.S. and NATO policy correctly identifies the challenges of deterring Russian aggression short of general war. Nevertheless, the literature falls short of sufficiently answering how to meet this challenge. An assessment of how to implement a deterrent strategy at the sub-conventional level against a nuclear-armed great power adversary like Russia is still necessary—this is the space in which this research exists.

E. RESEARCH DESIGN

This research strategically assessed Russia as a state actor, the effect of the U.S.—Russian relationship on U.S. deterrence, the means of transposing deterrence to the subconventional level, and the best strategy for deterring Russian gray zone conflict. This research began with a survey of the literature, which assisted in the development of the interview content for subject matter experts. The interviews were designed to fill a gap in the literature, expound on ideas in the literature, or weigh in on competing points of view in the literature. From the baseline research, a certain amount of time and effort went into

thinking about and explaining the history of Russian antagonism and the U.S.–Russian relationship. This foundational understanding was used to assist in the assessment of Russia as a state actor and comprehend its motivations for strategy and distrust with the West. Additionally, a significant amount of time was devoted to describing the core precepts of deterrence, which enabled the systematic assessment of how deterrence could be transposed or adapted to the lower levels of warfare. Finally, after developing the building block assessments and generating a holistic picture of how the United States and Russia are situated in the current strategic environment, and layering the adapted deterrence framework, this research led to an informed and thorough recommendation for a successful deterrent strategy against Russian gray zone conflict.

The sources utilized for this research were exclusively derived from open-source, non-classified information, and subject-matter expert interviews. Although classified sources could have offered further clarity and a different perspective on the research, unclassified data was utilized for two main reasons. First, many policymakers consistently rely on unclassified data and assessments to inform their policy decisions, and maintaining the research at the unclassified level would allow for the widest dissemination and use. Secondly, the intent of this research was to bring together the brightest subject matter experts to complement the literature on a current, emerging issue in U.S. national security to produce an assessment accessible to everyone—from academics, to government officials, to U.S. allies and partners—and the only way to achieve this was through the use of unclassified and open-source data.

Specifically, this research drew from primary sources, such as U.S. policy and declared strategy, Russian strategy documents, the NATO charter, and official statements, to provide a solid understanding of the past and current security environment in which subconventional deterrence strategy will be employed. Secondary sources, such as academic literature, provide an assessment of the current deterrent strategies and issues with contextual analysis. Secondary sources also provide analysis and consolidation of sources found only in the Russian language. Third, and possibly most important, secondary sources provide competing views, conflicting hypotheses, and alternative analyses on the subject that assisted in identifying the pertinent interview questions for the research.

To scope the research to the time allotted, sources and reviews concentrated on the timeline from the end of the Cold War until present, with the knowledge that deterrence theory existed well before the Cold War. Historical analysis, in comparison with current deterrent strategy, and the modern geopolitical strategic environment of great power competition and sub-conventional conflict provide a baseline of understanding on which the subject-matter expert interviews were predicated and compared.

The conclusions extrapolated from this research provide policymakers with an improved understanding of Russian strategy and decision calculus as well as U.S. deterrence capabilities and gaps from which to maintain or alter current U.S. policies. Additionally, this research has consolidated subject matter expertise to identify and fill gaps in the knowledge, eliminate misinterpretations between scholars, and provide an emerging and current discussion of a crucially relevant topic to U.S. national security.

II. RUSSIAN STRATEGIC ASSESSMENT AND USE OF THE GRAY ZONE

Putin's Russia is an adversary of the United States; the Kremlin needs to have an external enemy to distract the Russian people from the problems plaguing their country.

—Alina Polyakova⁵³

This chapter's depiction of the U.S.—Russian strategic relationship, strategic assessment of Russia, and analysis of Russia's gray zone strategy lays the groundwork for understanding how the United States can deter Russian gray zone conflict. The chapter's first task is to explore the recent historical relationship between the United States and Russia and how that relationship has shaped Russia's antagonism toward the United States and the West. Second, the chapter provides an assessment of Russian strategy and national objectives with respect to the United States and NATO, from the strategic nuclear level down to the sub-conventional level. The third task is to propose that the United States and Russia are woven into a stability—instability paradox at the nuclear and conventional level, leading the two states to carry out their conflicts at the sub-conventional level, or gray zone. Finally, the chapter analyzes Russia's gray zone activity and shows how the state pushes the boundaries of sub-conventional conflict to make progress toward achieving its national objectives.

A. U.S.-RUSSIAN RELATIONS

The end of the Cold War brought about a sense of hope for peace between nations; however, the relationship between the United States and Russia has systematically declined from optimism to distrust and, today, has landed squarely in adversarial territory. While Russia's distrust and resentment of the West reflects its perception of Western interference, bad faith actions, and NATO enlargement, these are only one dimension of the contentious relationship. Russia's rejection of Western diplomatic overtures is also driven by its

⁵³ Alina Polyakova, "Are U.S. and Russia in a New Cold War?," Brookings Institution, January 20, 2019, https://www.brookings.edu/opinions/are-u-s-and-russia-in-a-new-cold-war/.

overinflated sense of global importance, historical entitlement to territorial and influential expansion, and its need to inflate external threats to secure domestic support for the regime. To that end, this section provides a greater understanding of the sources of Russian antagonism toward the West through analysis of key historical events. This analysis provides vital insights into how Russia could perceive and react to potential strategies and greatly increases the prospect of success in identifying the most appropriate strategies for deterring Russian gray zone conflict, which is discussed in subsequent chapters.

Although it is unclear what percentage of a role each antagonistic factor plays, it is ultimately the actions of the United States and NATO—and the enlargement of NATO throughout history—that Russia cites as the main component to its antipathy and distrust of the West. This Russian viewpoint is not the consensus view of the scholarly literature or subject matter experts, although they do not dismiss NATO's enlargement and Western actions as a factor; however, if we are to understand how to successfully deter Russian gray zone actions, it is imperative to recognize the Russian perspective.

After the fall of the Soviet Union, the United States, in partnership with its European allies, structured the European security environment with little input from a weak Russia, touting few allies and an economic crisis because of the former Soviet Union's unsustainable overreach and unproductive economy. The new environment gave independence to formerly oppressed Soviet Union states, ousted communist regimes across Europe with free elections, and left Russia with the loss of territory and a complex hand of motivations toward its present desire for expansion.

During this time, the United States and its European allies extended diplomacy to Russia in the interest of security cooperation as the end of the Cold War brought about a sense of hope for peace between nations. From 1993 to 2001, President Bill Clinton cultivated a relationship with Russian President Boris Yeltsin and sought to integrate Russia into international institutions. In 1994, at the NATO summit in Brussels, a U.S. initiative, the Partnership for Peace, was established. The program was designed to create

trust between European and former Soviet Union states and currently has 21 members.⁵⁴ President Clinton stated that the program was a "track that [would] lead to NATO membership" and highlighted that it did not "draw another line dividing Europe a few hundred miles to the east."⁵⁵ Additionally, suffering a massive economic burden in 1997, Russia was added to the G7, which was then known as the G8, an inter-governmental political forum established in 1975 by France, Germany, Italy, Japan, the United Kingdom, and the United States.⁵⁶ The addition of Russia was meant to forward diplomatic relations and security cooperation between the states. Diplomatic efforts toward Russia continued in 1997 with the NATO–Russian Founding Act, which intended "to overcome the vestiges of past confrontation and competition and to strengthen mutual trust and cooperation."⁵⁷ The act also defined "the goals and mechanism of consultation, cooperation, joint decision-making and joint action that . . . constitute the core of the mutual relations between NATO and Russia, which attempted to strengthen diplomatic relations between Europe, the United States, and Russia even further.

Diplomatic efforts toward cooperation were undercut, however, by opposing U.S. policies that continued NATO enlargement and Russian opposition.⁵⁹ From March to June 1999, U.S.–Russian relations were dealt a devastating blow amid NATO's operations in Kosovo and Yugoslavia, which were undertaken without a United Nations Security Council resolution and against stark Russian objections, thus shaping Russia's threat

⁵⁴ "Partners," North Atlantic Treaty Organization, last updated September 25, 2019, https://www.nato.int/cps/en/natolive/51288.htm.

⁵⁵ Svetlana Savranskaya and Tom Blanton, "NATO Expansion: What Yeltsin Heard," National Security Archive, March 16, 2018, https://nsarchive.gwu.edu/briefing-book/russia-programs/2018-03-16/nato-expansion-what-yeltsin-heard.

⁵⁶ "The Group of Eight (G8) Industrialized Nations," Council on Foreign Relations, last modified June 14, 2013, https://web.archive.org/web/20131115103825/http://www.cfr.org/global-governance/group-eight-g8-industrialized-nations/p10647.

⁵⁷ Jack Mendelsohn, "NATO Russia Founding Act," Arms Control Association, accessed February 19, 2020, https://www.armscontrol.org/act/1997-05/features/nato-russian-founding-act.

⁵⁸ Mendelsohn.

⁵⁹ Polyakova, "New Cold War."

perception and worldview.⁶⁰ Recall Henry Kissinger's warning in 1999: "The transformation of the NATO alliance from a defensive military grouping to an institution prepared to impose its values by force undercut repeated American and allied assurances that Russia had nothing to fear from NATO expansion."⁶¹ The bombing marked the first time NATO had utilized military force without the authorization of the United Nations Security Council.

From the Russian perspective, President Vladimir Putin has repeatedly called the bombing a turning point in U.S.–Russian relations and linked it to NATO's eastward expansion. 62 During the late 1990s, there was continued tension amid debate between the United States, NATO, and Russia concerning NATO's enlargement eastward, and in 1999, Poland, Hungary, and the Czech Republic joined the organization amid a flurry of Russian opposition. 63 Putin claimed that the West would not only fail to respect Russian interests through NATO expansion but also encircle Russia and its military. The bombing in Kosovo has been cited and used throughout Russia's history, including a press release in 2012 and a propaganda campaign in 2014, when Russia aired a television special on the bombings as part of an overall information campaign supporting the annexation. 64 In the press release, President Putin labeled NATO "an organization that has been assuming an attitude that is inconsistent with a 'defensive alliance.' "65 Putin continues to reference the NATO bombing of Kosovo by expressing that "states that have fallen victim to 'humanitarian' operations and the export of 'missile-and-bomb democracy' appealed for respect for legal

 $^{^{60}}$ Erik Yesson, "NATO and Russia in Kosovo," Royal United Services Institute Journal 144, no. 4 (August 1999): 20–26.

⁶¹ Henry Kissinger, "New World Disorder," *Newsweek*, May 30, 1999, http://www.newsweek.com/new-world-disorder-166550, quoted in Matthew Dal Santo, "The Shortsightedness of NATO's War with Serbia over Kosovo Haunts Ukraine," *National Interest* (blog), September 2, 2014, http://nationalinterest.org/blog/the-buzz/the-shortsightedness-natoswar-serbia-over-kosovo-haunts-11180.

⁶² Russia Insight, "Putin on Russia-US Relations Deteriorating."

^{63 &}quot;Enlargement," North Atlantic Treaty Organization, last modified February 3, 2020, https://www.nato.int/cps/en/natolive/topics_49212.htm.

⁶⁴ Steve Gutterman, "Russia Uses 1999 NATO Bombing in Media War over Crimea," Reuters, March 24, 2014, https://www.reuters.com/article/us-ukraine-crisis-russia-kosovo/russia-uses-1999-nato-bombing-in-media-war-over-crimea-idUSBREA2N0SC20140324.

⁶⁵ Russia Insight, "Putin on Russia-US Relations Deteriorating."

standards and common human decency. But their cries were in vain—their appeals went unheard."⁶⁶ This tactic—which uses actions taken by the West that go against Russian interests as a rallying point for President Putin's domestic population against an outside threat—is one that he employs often and subsequently continues to add friction to efforts toward cooperation. Alina Polyakova from the Brookings Institute writes that "Putin's Russia is an adversary of the United States; the Kremlin needs to have an external enemy to distract the Russian people from the problems plaguing their country."⁶⁷

Tensions continued to rise as NATO expanded eastward, adding seven Central and Eastern European countries, including Bulgaria, Estonia, Latvia, Lithuania, Romania, Slovakia, and Slovenia, in 2004. From the European perspective, NATO's enlargement was at the behest of potential member states who had been striving for NATO membership since the collapse of the Soviet Union. NATO membership meant protection for their newfound sovereignty and an extended security guarantee to those states struggling for stability or perilously located close to an anti-democratic aggressor such as Russia. The entrance of these former Soviet bloc states into NATO also meant a stronger and more secure Europe through the shared values and processes of democracy.

From the Russian perspective, NATO's enlargement confirmed to President Putin his thoughts that the United States and NATO were once again trying to expand democracy and encircle Russia, thus fueling this source of antagonism. Furthermore, the continued enlargement of NATO served to reduce the physical territory and political influence space that Russia had available for future expansion. NATO's enlargement was seen as a way for the West not only to expand democracy but also to continue its strategy of containment and disrespect toward Russia.

In 2008, Russia continued to pursue its strategic goals of halting the enlargement of NATO and expansion by invading Georgia, a former Soviet bloc state with previous aspirations of joining NATO. Tensions between Russia and Georgia escalated after the

⁶⁶ Russia Insight.

⁶⁷ Polyakova, "New Cold War."

⁶⁸ North Atlantic Treaty Organization, "Enlargement."

latter transitioned to a pro-Western regime and culminated in Russia's violating the sovereign territorial integrity of Georgia by launching a ground attack, information warfare campaign, naval blockade of the Georgian coast, and an air bombing campaign. The conflict ended with the signing of a ceasefire agreement. After the ceasefire, Russian forces continued to occupy parts of Georgia in the south and utilized Russian-backed paramilitary forces for ethnic cleansing of Georgian villages in South Ossetia. ⁶⁹ This invasion of a sovereign state, coupled with the humanitarian atrocities at the hands Russia, and Russian-backed forces signaled the end of positive diplomatic relations and an era marked by a Russian adversarial view of the West. In response to the invasion, NATO suspended all formal meetings of the NATO–Russia Council as well as cooperation in other areas. ⁷⁰

A short reprieve from the adversarial tension and a rejuvenated hope for diplomatic relations came with the signature of the ceasefire in the Russian–Georgian War. U.S. President Barack Obama endeavored for a reset in U.S.–Russian relations with newly elected moderate Russian President Dmitry Medvedev.⁷¹ During this time, Albania and Croatia quietly joined NATO in 2009.⁷² The reset of relations between the two states ultimately failed, however, when Russian President Vladimir Putin once again took office in 2012 and redefined the relationship with the United States as adversarial. In a press release, President Putin stated,

Some aspects of U.S. and NATO conduct . . . contradict the logic of modern development, relying instead on the stereotypes of a block-based mentality. Everyone understands what I am referring to—an expansion of NATO that includes the deployment of new military infrastructure with its U.S.-drafted plans to establish a missile defense system in Europe. I would not touch on this issue if these plans were not conducted in close proximity to Russian

⁶⁹ James Hider, "Russian-Backed Paramilitaries 'Ethnically Cleansing Villages," *Times* (London), August 27, 2008, https://web.archive.org/web/20080827212200/http://www.timesonline.co.uk/tol/news/world/europe/article4621592.ece; Amnesty International, *Civilians in the Line of Fire: The Georgia–Russia Conflict* (London: Amnesty International, 2008), https://web.archive.org/web/20081212205224/http://amnesty.org/en/library/asset/EUR04/005/2008/en/d9908665-ab55-11dd-a4cd-bfa0fdea9647/eur040052008eng.pdf.

^{70 &}quot;Relations with Russia," North Atlantic Treaty Organization, August 5, 2019, https://www.nato.int/cps/en/natolive/topics_49212.htm.

⁷¹ Darya Korsunskaya, "Putin Says Russia Must Prevent 'Color Revolution," Reuters, November 20, 2014, https://www.reuters.com/article/us-russia-putin-security-idUSKCN0J41J620141120.

⁷² North Atlantic Treaty Organization, "Enlargement."

borders, if they did not undermine our security and global stability in general.⁷³

President Putin, with his background as a KGB officer skeptical of the West, was and still is convinced that the United States attempted to interfere in an already contentious period in Russian politics by inciting and fueling the mass protests in Moscow from 2011 to 2012. The protests came on the heels of a wave of toppled autocratic governments during the Arab Spring, which started in 2010.⁷⁴ President Putin voiced concerns that the United States had a hand in the Arab Spring uprising and had been trying to subjugate Russia by sowing unrest among the Russian population through stoking protests against him.⁷⁵ This genuine, but incorrect, belief that the United States was involved only stood to further the distrust and adversarial relationship with the West. President Putin capitalized on the opportunity to inflate the threat the United States posed to Russia to his gain support from his domestic base.⁷⁶

The need for Russia to arrest the expansion of Western influence, in combination with its desire to expand its own influence into the former Soviet bloc states, ultimately led to one of the most punctuating events in U.S.–Russian relations, causing a dramatic increase in antagonism between the states. In 2014, Russia invaded Ukraine and annexed the Crimean Peninsula, violating the signed NATO–Russia Founding Act, which pledged to uphold "respect for sovereignty, independence and territorial integrity of all states and their inherent right to choose the means to ensure their security." The annexation

⁷³ Putin, "Russia and the Changing World."

⁷⁴ Alexey Malashenko, *Russia and the Arab Spring* (Moscow: Carnegie Moscow Center, October 2013), https://carnegieendowment.org/files/russia_arab_spring2013.pdf.

⁷⁵ Russia Insight, "Putin on Russia-US Relations Deteriorating"; Korsunskaya, "Putin Says Russia Must Prevent 'Color Revolution'"; Miriam Elder, "Vladimir Putin Accuses Hillary Clinton of Encouraging Russian Protests," *Guardian*, December 8, 2011, https://www.theguardian.com/world/2011/dec/08/vladimir-putin-hillary-clinton-russia; Steve Gutterman, "Putin Says U.S. Stoked Russian Protests," Reuters, December 8, 2011, https://www.reuters.com/article/us-russia/putin-says-u-s-stoked-russian-protests-idUSTRE7B610S20111208.

⁷⁶ "Transcript: Putin's Revenge," Frontline, accessed February 19, 2020, https://www.pbs.org/wgbh/frontline/film/putins-revenge/transcript/.

^{77 &}quot;Founding Act," North Atlantic Treaty Organization, last modified October 12, 2009, https://www.nato.int/cps/en/natolive/official_texts_25468.htm.

followed failed attempt by Russia to disrupt the growing relationship between Ukraine and the West by preventing Ukraine from signing the Ukraine–European Union Association Agreement. Russia pressured the Ukrainian leadership, through trade obstructions and leverage as a prominent trade partner, to sign an alternative agreement with the Customs Union of Russia, Belarus, and Kazakhstan, which it did. Russia's victory was short lived as the move sparked outrage in the Ukrainian domestic base, which wanted to turn toward the West through the European Union (EU) agreement. The dissatisfaction led to a revolt, including violent confrontations and casualties, ending in the ousting of pro-Russian President Yanukovych, who remains in exile today in Russia. 79

Shortly thereafter, on June 27, 2014, new Ukrainian President Petro Poroshenko signed the Ukraine–European Union Association Agreement and was quoted as saying that it was Ukraine's "first but most decisive step" toward EU membership. 80 The agreement established a political and economic association between the parties by committing them to cooperation on topics including the convergence of economic policy, legislation, information exchange, worker's rights, modernization of energy infrastructure, and increased regulation. 81 The agreement also committed Ukraine to make reforms damaging to Russian influence in the region, such as converging its policies, legislation, and standards to conform to the EU in exchange for support through financial assistance, knowledge sharing, and access to EU markets. Seeing its influence contract, Russia pushed back on Ukrainian westernization using gray zone tactics that supported rebel fighters and sowed discourse and violence in Donbas, which ultimately triggered an international crisis,

⁷⁸ Will Eglund and Kathy Lally, "Ukraine, under Pressure from Russia, Puts Brakes on E.U. Deal," *Washington Post*, November 21, 2013, https://www.washingtonpost.com/world/europe/ukraine-under-pressure-from-russia-puts-brakes-on-eu-deal/2013/11/21/46c50796-52c9-11e3-9ee6-2580086d8254_story.html.

⁷⁹ Oleg Varfolomeyev, "Failure to Sign Association Agreement with EU Triggers Violence in Ukrainian Capital," *Eurasia Daily Monitor* 10, no. 215 (December 2, 2013), https://jamestown.org/program/failure-to-sign-association-agreement-with-eu-triggers-violence-in-ukrainian-capital/.

^{80 &}quot;Ukraine Ratifies EU Association Agreement," DW, September 16, 2014, https://www.dw.com/en/ukraine-ratifies-eu-association-agreement/a-17925681.

⁸¹ Adrian Croft, "European Union Signs Landmark Association Agreement with Ukraine," Reuters, March 21, 2014, https://www.reuters.com/article/us-ukraine-crisis-eu-agreement-idUSBREA2K0JY 20140321.

giving Russia a thin veil of reasoning for the annexation of Crimea that followed—on the auspices of defending the oppressed Russian people.

The annexation of Crimea was economically and diplomatically costly to Russia, and the relationship between Russia and the United States and NATO; however, it might still be perceived as a Russian victory. Chapter One of the NATO membership action plan states that aspirant nations must be able to "settle ethnic disputes or external territorial disputes including irredentist claims or internal jurisdictional disputes by peaceful means in accordance with OSCE [Organization for Security and Cooperation in Europe] principles and to pursue good unneighborly relations."82 By fomenting a territorial conflict, Russia effectively denied Crimea NATO membership candidacy. 83 The United States and Europe responded to the invasion by sanctioning Russian oligarchs and businesses, providing support to Ukraine and publicly condemning Russian actions.⁸⁴ In response, the G8 suspended Russia. The EU discontinued regular summits with Russia, suspended diplomatic progress on issues regarding visas and a new bilateral agreement, and imposed gradual sanctions on Russia. 85 Additionally, after the downing of flight MH17 on June 17, 2014, over territory controlled by Russian-supported rebels in Ukraine, the EU significantly expanded its sanctions and stopped Russia's accession to the Organisation for Economic Co-operation and Development and the International Energy Agency. 86 The events of Crimea and the diplomatic aftermath played well into the source of antagonism, whereby Russia perceived the West as an enemy of the Kremlin; however, the events were also damaging to Russia's image as a great power in the international community, which concerned the Kremlin.

^{82 &}quot;Membership Action Plan," North Atlantic Treaty Organization, last modified July 27, 2012, https://www.nato.int/cps/en/natohq/official_texts_27444.htm?.

⁸³ North Atlantic Treaty Organization.

⁸⁴ Eugene Rumer and Richard Sokolsky, *Thirty Years of U.S. Policy toward Russia: Can the Vicious Circle Be Broken?* (Washington, DC: Carnegie Endowment for International Peace, June 2019), https://carnegieendowment.org/2019/06/20/thirty-years-of-u.s.-policy-toward-russia-can-vicious-circle-be-broken-pub-79323.

⁸⁵ Mario Damen, "Russia," European Parliament, November 2019, https://www.europarl.europa.eu/factsheets/en/sheet/177/Russia.

⁸⁶ Damen.

Just two years later, in 2016, Russia attempted to interfere in the U.S. presidential election by gaining access to the Democratic National Committee, leaking its documents to the media, and executing an information operations influence campaign to sway American voters. Research The interference was a milestone in U.S.—Russian relations as it highlighted the lengths to which Russia was willing to expand its influence into the West and assert itself as a great power able to rival the capabilities and will of the West. Russia denied any involvement; however, British and U.S. intelligence agencies expressed "high confidence that Russian President Vladimir Putin ordered an influence campaign designed to interfere in the 2016 U.S. elections and undermine confidence in the U.S. democratic process." In response, former President Barack Obama expelled 35 Russian diplomats from the United States, increased sanctions on a broader set of Russian businesses and individuals, and once again, publicly condemned Russian actions to the international community. Response in the U.S. Russian diplomated community.

In 2017, U.S. President Donald Trump took office with the hopes of improving relations with Russia; however, despite his intentions, U.S.–Russian relations have continued to deteriorate alongside relations between Russia and other Western powers.⁹⁰ At the beginning of 2018, in Salisbury, England, Russia attempted to assassinate Sergei Skripal, a Russian double agent working for the United Kingdom's intelligence services, and his daughter Yulia Skripal by poisoning them with a Novichok nerve agent. In a

⁸⁷ Spencer Ackerman and Sam Thielman, "US Officially Accuses Russia of Hacking DNC and Interfering with an Election," *Guardian*, October 8, 2016, https://www.theguardian.com/technology/2016/oct/07/us-russia-dnc-hack-interfering-presidential-election; Office of the Director of National Intelligence, *Background to "Assessing Russian Activities and Intentions in Recent U.S. Elections": The Analytic Process and Cyber Incident Attribution* (Washington, DC: National Intelligence Council, January 6, 2017), 11, https://assets.documentcloud.org/documents/3254237/Russia-Hack-Report.pdf.

⁸⁸ Office of the Director of National Intelligence, 11.

⁸⁹ Barack Obama ed. Statement by the President on Actions in Response to Russian Malicious Cyber Activity and Harassment (Washington, DC: Office of the Press Secretary. 2016). https://obamawhitehouse.archives.gov/the-press-office/2016/12/29/statement-president-actions-responserussian-malicious-cyber-activity

⁹⁰ Michael E. O'Hanlon, "If Trump Really Wants to Improve Relations with Russia, He Should Persuade NATO to Stop Expanding," Brookings Institution, April 14, 2017, https://www.brookings.edu/blog/order-from-chaos/2017/04/14/if-trump-really-wants-to-improve-relations-with-russia-he-should-persuade-nato-to-stop-expanding/; "Remarks by President Trump and President Putin of the Russian Federation in Joint Press Conference," White House, July 16, 2018, https://www.whitehouse.gov/briefings-statements/remarks-president-trump-president-putin-russian-federation-joint-press-conference/.

collective response and outcry against the use of banned chemical weapons, numerous countries, including the United Kingdom, the United States, and NATO expelled more than 150 Russian diplomats, approved additional sanctions against Russia, denied accreditation to Russian diplomatic positions at NATO, reduced the size of Russian consulates, and boycotted the 2018 FIFA world cup held in Russia. Russia responded similarly by expelling 23 British diplomats and closing both the British Council's office and the British Consulate in St. Petersburg, further reducing the diplomatic touchpoints and avenues for cooperation between Russia and the West. Petersburg and the West.

Causing even more consternation was Russia's continued attempts to reduce Western expansion and expand its influence by interfering in European elections and backing Bashar al-Assad's regime in Syria and Nicolás Maduro's regime in Venezuela, all running counter to U.S. interests and values. ⁹³ In response, NATO suspended practical cooperation with Russia including projects in Afghanistan for counterterrorism and scientific collaboration.

Russia's desire to "ensure a new world order," secure spheres of influence, and reverse what it portrays as 30 years of Western oppression and expansion into Russian territory has outweighed the mutual interest of arms control that the United States and Russia have shared since the Cold War. 94 Despite fluctuations in tensions and sources of hostility between the two countries, one constant in U.S.–Russian relations has always been arms control. 95 As Brad Roberts explains,

⁹¹ Heather Nauert, "Imposition of Chemical and Biological Weapons Control and Warfare Elimination Act Sanctions on Russia" (press release, Washington, DC: Department of State, August 8, 2018), https://www.state.gov/imposition-of-chemical-and-biological-weapons-control-and-warfare-elimination-act-sanctions-on-russia/; "Russia Faces a Wave of Diplomatic Expulsions," BBC News, March 26, 2018, https://www.bbc.co.uk/programmes/p062f9c1.

⁹² Matthew Bodner and Karla Adam, "Russia to Expel 23 British Diplomats, Close Consulate in Escalating Row over Poisoned Ex-Spy," *Washington Post*, March 17 2018, https://www.washingtonpost.com/world/russia-to-expel-23-british-diplomats-and-close-consulate-in-escalating-row-over-poisoned-ex-spy/2018/03/17/db431216-29c8-11e8-874b-d517e912f125_story.html.

⁹³ Rumer and Sokolsky, Thirty Years of U.S. Policy toward Russia.

⁹⁴ Putin, "Russia and the Changing World."

⁹⁵ Although the veracity, effectiveness, and number of arms control agreements have fluctuated, the topic of arms control and counterproliferation has been a consistent point of mutual interest between the two states.

With varying degrees of consistency over presidential administrations of both parties since the end of the Cold War, U.S. strategic policy has been built on four core premises. The first and central premise was that the end of Cold War confrontation provided a significant opportunity to put the strategic military relationship with Russia on a new footing of cooperation and reassurance. U.S. policy makers have therefore consistently pursued arms control with Russia, believing that improvements to the nuclear relationship would help to improve the broader political relationship.⁹⁶

Unfortunately, in recent years, this area of relative stability and diplomatic cooperation has also declined with the overall relationship. Russia believes that it has built up enough state power to do something about the unfair, oppressive environment built after the Cold War, which includes disengaging from relic arms control agreements that stifle Russian military growth.

In practice, despite historical consistency, nuclear arms agreements have already begun to disintegrate with the potential for more to fall apart in the future. In October 2018, after a summit between the United States and Russia attempting to save the Intermediate-Range Nuclear Forces (INF) Treaty failed, the United States declared its intention to pull out of the treaty. The INF Treaty had been a landmark achievement in 1988 and had prompted cooperation toward the end of the Cold War. 97 The United States cited Russia's breach of the treaty through deployment of INF-violating ground-launched cruise missiles as the leading cause for pulling out of the treaty; however, the United States also acknowledged the need to counter China's arms build-up in the South China Sea as another factor in the withdrawal decision. 98 In February 2019, the United States suspended compliance with the treaty and formally withdrew in August 2019. A day later, Russia also suspended compliance with the treaty, ending a 31-year arms agreement, which had verifiably eliminated an entire class of U.S. and Russian weapons in Europe and created avenues for transparency and communication through mutual onsite inspections to prove

⁹⁶ Brad Roberts, "It's Time to Jettison Nuclear Posture Reviews," *Bulletin of the Atomic Scientists* 76, no. 1 (2020): 33, https://doi.org/10.1080/00963402.2019.1701282.

⁹⁷ Daryl Kimball and Kingston Reif, "The Intermediate Range Nuclear Forces (INF) Treaty at a Glance," Arms Control Association, August 2019, https://www.armscontrol.org/factsheets/INFtreaty.

⁹⁸ "President Trump to Pull U.S. from Russia Missile Treaty," BBC News, October 20, 2018, https://www.bbc.com/news/world-us-canada-45930206.

compliance. 99 Mikhail Gorbachev commented after the nuclear treaty withdrawal that "a new arms race has been announced." 100 Another U.S.–Russian arms control treaty, the New Strategic Arms Reduction Treaty (New START), will expire in February 2021 although it can be extended for another five years with mutual agreement by the two parties. If it expires, it will constitute the end of the last major arms control agreement between the United States and Russia and a transition to an uncertain new period in U.S.–Russian relations without restrictions on strategic weapons. 101

The relationship between the United States and Russia is at an impasse. The U.S. diplomatic climate recognizes Russia as an aggressive, toxic adversary, which leaves very few occasions to recognize the opportunities for cooperation within the mutually shared interests that do exist. Meanwhile, Russia maintains its historical expansionist beliefs not only in territory but also in political influence, and President Putin relies on emboldening the message that the West represents an existential threat to the Russian state to gain the domestic support he needs to stay in power. ¹⁰² These two sources of antagonism combined with Russia's view of NATO's enlargement as aggressive, the learned distrust between Russia and the West, and the sheer lack of communication show how the relationship arrived at the adversarial position it is in today.

Understanding the sources of Russian antagonism and how the relationship became adversarial provides the United States an opportunity to leverage that comprehension toward developing a successful gray zone deterrent strategy—to effectively deter Russia using any manner of diplomatic relations, consistent communication, and strategic touchpoints between the states. Currently, there are very few such opportunities, and the

⁹⁹ "Russia Suspends INF Treaty in 'Mirror Response' to U.S. Halting the Agreement," Russia Today, February 2, 2019, https://www.rt.com/news/450395-russia-suspends-inf-treaty/.

¹⁰⁰ Eliot Engel and Adam Smith, "US Pulling Out of the INF Treaty Rewards Putin, Hurts NATO," CNN, February 1, 2019, https://www.cnn.com/2019/02/01/opinions/us-pulling-out-of-the-inf-treaty-rewards-putin-hurts-nato-engel-smith/index.html.

^{101 &}quot;New START Treaty," Department of State, last modified February, 13, 2020, https://www.state.gov/new-start/; Vince Manzo, *Nuclear Arms Control without a Treaty?: Risks and Options after New START* (Arlington, VA: Center for Naval Analyses, March 2019), https://www.cna.org/CNA_files/PDF/IRM-2019-U-019494.pdf.

¹⁰² Putin, "Russia and the Changing World."

remaining consistent avenue of communication is between military leaders, including the Russian chairman of the military committee, General Petr Pavel; the Russian chief of defence, General Valery Gerasimov; and U.S. military leaders, such as the chairman of the Joint Chiefs of Staff and supreme allied commander of Europe, General Curtis Scaparrotti. ¹⁰³

B. RUSSIAN STRATEGIC ASSESSMENT

Having established the historical events that shaped the relationship between Russia and the West since the end of the Cold War, this section provides an in-depth analysis and assessment of Russia as a state actor today. The assessment includes Russia's threat perceptions, view of the current security environment, view of itself, view of the West, strategic priorities, and threshold for risk tolerance. Overall, the assessment shows that Russia is a complicated state actor with layered objectives, threat perceptions, and risk tolerance, and it is crucial to carefully consider each when developing a deterrence strategy against Russian gray zone activity, which is discussed in a subsequent chapter.

The subject matter experts interviewed for this research generally support the consensus of the current literature—that Russia is an opportunistic revisionist state in slow decline with adversarial views of the West including the United States and NATO. 104 Russia is also eager to be seen as a great power on the international stage to the extent that it is consulted on, and even deferred to, for issues in its geographical region. Additionally, President Putin shows great concern over the possibility of the West's inciting a color revolution to undermine Russia's domestic stability. Russia's main strategic objectives include regime survival; geopolitical dominance, including recognition as a great power; a

^{103 &}quot;NATO-Russia Relations: The Facts," North Atlantic Treaty Organization, last modified August 9, 2019, https://www.nato.int/cps/en/natohq/topics_111767.htm. Although the structure for the U.S. chairman of the Joint Chiefs of Staff (CJCS) is in place to communicate regularly with Russian military leaders, research indicates that the last CJCS to do so was General Francis Dunford, who served from October 1, 2015, until September 30, 2019.

¹⁰⁴ The research interviewees' assessment of the type of revisionist varied. Assessments ranged from "staunch revisionist" that desired to destroy the current international security order to "mild revisionist" that sought to renegotiate the current international security order. All interviewees agreed that Russia is a revisionist power.

renegotiation of the European security order; the weakening of the West, including U.S. influence; and cohesion of the NATO alliance.

The experts interviewed for this research also concur with the current literature in assessing Russia as risk-averse to open conflict with the United States and NATO but risk-acceptant to lower levels of conflict, such as action in the gray zone, if it forwards Russia's national objectives. ¹⁰⁵ Eugene Rumer and Richard Sokolsky from the Carnegie Endowment for International Peace effectively summarize this position: "Russian leaders see their country as a great power in charge of its destiny. They do not accept American primacy and want to accelerate the transition from a unipolar to a multipolar world; they believe they are entitled to a sphere of influence and will resist perceived U.S. intrusions." ¹⁰⁶

Interviews with subject matter experts for this research identified Russia's vulnerabilities, and further research suggests that those vulnerabilities have contributed to Russia's decline. This understanding provides context to Russia's view of its internal and external threats. Russia's vulnerabilities includes its political structure, a declining oil-based economy, poor international standing, limited allies (only Kazakhstan and Belarus), and a population frustrated with the lack of rule of law, quality of life, political say, and limited disposable income. ¹⁰⁷ The frustrations from Russian citizens are only rising as the energy prices once again begin to decline, the United States enforces broad economic sanctions, and the Russian government has limited ability to provide a reprieve or solution to its citizens. ¹⁰⁸ Douglas Lute, retired U.S. Army lieutenant general and former ambassador and United States permanent representative to the North Atlantic Council, states that Russia is "weak economically, weak internationally, and has no conventional

¹⁰⁵ See Appendix A.

¹⁰⁶ Rumer and Sokolsky, Thirty Years of U.S. Policy toward Russia, 2.

^{107&}lt;sub>See Appendix A.</sub>

¹⁰⁸ Cory Welt et al., U.S. *Sanctions on Russia*, CRS Report No. R45415 (Washington, DC: Congressional Research Service, January 17, 2020), https://fas.org/sgp/crs/row/R45415.pdf.

measure of state power to assess that they are doing well." 109 He also notes that Russia today is weaker compared to the Soviet Union overall, as the latter had allies and were internally stable while the former does not. 110

Russia perceives the international environment and future world development as competitive, under tension, in rivalry over values, politically and economically unstable, and generally complicated in all foreign relations. 111 This view is the lens through which Russia evaluates its threats, weighs heavily on the prospect of future cooperation and diplomatic strategies, and is the means by which Russia will achieve its strategic goals in the future. Russia's internal threat perception reflects a tendency "towards shifting the military risks and military threats to the information space and the internal sphere of the Russian Federation." 112 In much of its own doctrine, Russia acknowledges its concern over color revolutions led by the United States and targeted at the internal Russian population. As mentioned previously, Russia blames the United States for the Arab Spring and civil unrest in Russia after the 2011 Russian elections. Russia recognizes its own internal instability and economic deterioration as a potential opportunity for an adversary to gain control and influence in Russia. 113 To protect from this, Russia uses a gray zone strategy of non-military means, such as information campaigns directed at ethnic Russian populations in near-abroad states and Western populations in an attempt to sow discord and gain influence. Russia also utilizes the information domain to solidify the support of its domestic base through camaraderie over a common enemy in the West.

While Russia states that it believes a large-scale war is less likely, it sees risks in other areas increasing. ¹¹⁴ The main external risks that Russia identifies in its 2014 national

¹⁰⁹ Dr. Douglas Lute (retired U.S. Army lieutenant general and former ambassador and United States permanent representative to the North Atlantic Council), interview with author, November 26, 2019.

¹¹⁰ Lute, interview with author.

^{111 &}quot;The Military Doctrine of the Russian Federation," Embassy of the Russian Federation to the United Kingdom, June 29, 2015, https://rusemb.org.uk/press/2029.

¹¹² Embassy of the Russian Federation to the United Kingdom.

¹¹³ Embassy of the Russian Federation to the United Kingdom.

¹¹⁴ Embassy of the Russian Federation to the United Kingdom.

security strategy include the build-up of NATO's power and the subsequent expansion of the alliance, the build-up of military contingents in waters adjacent to Russia, the establishment of regimes that threaten Russian interests, and the demonstration of force through military exercises. Russia also recognizes the changing character of conflict includes the utilization of sub-conventional means and the "integrated employment of military force and political, economic, informational or other non-military measures implemented with a wide use of the protest potential of the population and of special operations forces." Russia's perception of the international environment as competitive and hostile, its desire for revision, and the recognition of the increased use of sub-conventional strategies drive Russia's strategic ends and its use of the gray zone strategies to achieve those ends. 116

John Mearsheimer writes, "When nations are dissatisfied with the status quo, the prospects for deterrence are not promising." ¹¹⁷ He posits, "Anytime a state is unhappy with the status quo, it is going to search hard for ways to change it." ¹¹⁸ As stated in its 2014 "Military Doctrine of the Russian Federation," Russia seeks revision to the international order—the status quo—because its believes that the "existing international security architecture (system) does not ensure equal security for all states." ¹¹⁹ That statement gives a more openly acceptable reason for Russia to seek the revision of the European security order; however, Russia does not believe that all states are equal or equally entitled to sovereignty or security. ¹²⁰ Russia believes that great powers (such as it considers itself to be) should have a greater say in how the smaller or weaker states in their

¹¹⁵ Embassy of the Russian Federation to the United Kingdom.

¹¹⁶ Embassy of the Russian Federation to the United Kingdom.

¹¹⁷ John J. Mearsheimer, *Conventional Deterrence* (Ithaca, NY: Cornell University Press, 1983), 211. See also John J. Mearsheimer, "Why the Soviets Can't Win Quickly in Central Europe," *International Security* 7 (Summer 1982): 3–39; Samuel P. Huntington, "Conventional Deterrence and Conventional Retaliation in Europe," *International Security* 8 (Winter 1983–84): 32–34.

^{118 &}quot;Conventional Deterrence: An Interview with John J. Mearsheimer," *Strategic Studies Quarterly* 12, no. 4 (Winter 2018): 3–8, https://www.airuniversity.af.edu/Portals/10/SSQ/documents/Volume-12_Issue-4/Mearsheimer.pdf.

¹¹⁹ Embassy of the Russian Federation to the United Kingdom, "Doctrine of the Russian Federation."

¹²⁰ Embassy of the Russian Federation to the United Kingdom.

region operate. 121 The Russian sentiment that the current international security system "does not ensure equal security for all" 122 is just another way of saying that the system does not recognize Russia as the great power for which it would like to be recognized. Many observers are concerned that Russia is "seeking regional hegemony and the means to project power globally . . . [by] pursuing determined military buildups aimed at neutralizing U.S. strengths . . . [through] gray-zone aggression—intimidation and coercion in the space between war and peace." 123

Russia is a revisionist and an expansionist state but not to the point that it will expand its territory to incite a powerful response from either the United States or NATO. Many of the interviewees noted that Russia seeks to regain the territory it sees as "lost" by the collapse of the Soviet Union. Interviewees also recognized Russia's desire to stop the expansion of NATO any further to the east. Since the beginning of NATO's enlargement strategy, Russia feared that NATO would be unrestricted despite the affirmation of the United States and NATO to the contrary, which is why it drew a red line for the expansion into Georgia and Ukraine. Pospite recognizing the importance of territory to Russia, several scholars interviewed for this study, including the director of the Russia Studies Program at the Center for Naval Analyses, Michael Kofman, were careful to note that the reassertion of power and collection of territory do not necessarily include the Baltic states. In the immediate abroad, Russia is amenable to Georgia, Ukraine, Azerbaijan, and Moldova's staying outside Russian control as long as they also remain out of NATO and "remain neutral in terms of security arrangements." According to Nadezhda

¹²¹ See Appendix A.

¹²² Embassy of the Russian Federation to the United Kingdom, "Doctrine of the Russian Federation."

¹²³ National Defense Strategy Commission, *Providing for the Common Defense*, v.

¹²⁴ Nadezhda Arbatova, "Reaching an Understanding on Baltic Security," *Survival: Global Politics and Strategy* 60, no. 3 (2018): 115–132, https://doi.org/10.1080/00396338.2018.1470766.

¹²⁵ Mr. Michael Kofman (director of the Russia Studies Program at the Center for Naval Analyses), interview with author, October 23, 2019.

¹²⁶ Paris Charter (1990), 3, https://www.osce.org/mc/39516?download=true.

Arbatova, "Russia's policy in the post-Soviet space has been, and remains, the main factor shaping the development of its relations with the West." 127

Throughout the interviews, four themes emerged surrounding Russian strategic objectives. A comparison of these conclusions to the analyses in current literature revealed a consensus on these themes. The Russian strategic objectives were assessed with high confidence and include the following:

- 1. The protection of the regime and state, including Vladimir Putin staying in power
- 2. Russia's gaining geopolitical dominance of its near abroad including being consulted on decisions and policies in the region 128
- 3. Renegotiating the European security architecture including gaining what it sees as its rightful place at the table and being recognized as a great power. Russia intends to structure the security environment so that its vote counts as much as the votes of the United States and European countries, even when it is opposed to U.S. interests.
- 4. Weakening the cohesion of the NATO alliance to diminish U.S. involvement and gain leverage in Europe¹²⁹

¹²⁷ Nadezhda Arbatova, "Reaching an Understanding on Baltic Security," *Survival: Global Politics and Strategy* 60, no. 3 (2018): 122, https://doi.org/10.1080/00396338.2018.1470766.

¹²⁸ It is worth noting that the term "near abroad" is a Russian term that has been adopted by many U.S. scholars; however, it can be detrimental to countries in that geographical region to accept the term without recognizing its implications for them.

¹²⁹ Except for the first one, the Russian strategic goals and priorities are not ranked in any particular order. The research shows no ranking of preferences; rather, it shows that Russia will forward any of these objectives based on the opportunities presented it. Valery Manilov, "National Security of Russia," Harvard Kennedy School's Belfer Center, accessed February 19, 2020, https://www.belfercenter.org/publication/national-security-russia; Olga Oliker, "Unpacking Russia's New National Security Strategy," Center for Strategic and International Studies, January 7, 2016, https://www.csis.org/analysis/unpacking-russias-newnational-security-strategy; Embassy of the Russian Federation to the United Kingdom, "Doctrine of The Russian Federation"; Quentin Buckholz et al., *Checkmating Russia's Assertiveness in Eastern Europe* (New York: Columbia University, May 5, 2017), https://sipa.columbia.edu/sites/default/files/migrated/documents/RAND%20Corp%20Capstone%20Final%20Report_FOR%20PUBLICATION.pdf. See also Appendix A.

Russia aims to achieve these objectives at the strategic level to forward the stature and strength of the state. These are Russia's "ends," as described by Brad Roberts, and our understanding of them is crucial to an overall deterrent strategy toward Russia. The strategy and state power that Russia uses to achieve these ends are the "means" and "ways" that fall mostly in the gray zone, which this research intends to deter. Subsequent chapters explore the deterrence of the gray zone through the ends, ways, and means construct; however, it is important first to understand how Russia is situated vis-à-vis its adversaries.

C. A COMPARISON OF U.S. AND RUSSIAN STATE POWER

A complete understanding of relative national strength is critical to understanding why Russia employs a gray zone strategy toward the United States. Interview data and current literature concur in the assessment that Russia is outmatched at the conventional military level beyond its near abroad and in a prolonged engagement. Further, Russia and the United States are situated in a stability–instability paradox where they are stable at the nuclear and conventional level, creating instability at the sub-conventional level where Russia prefers to operate in the gray zone. The dynamics of the relative strength of the United States and Russian exist in four categories of state power: diplomatic, information, military, and economic (DIME). This section touches on all the aspects but focuses heavily on the military dimension.

Michael Kofman explains that Russia is outmatched by the United States in economic and diplomatic means, but Russia does well diplomatically with the resources it has, given its limited relative influence in the world. ¹³⁰ In informational means, including cyber, propaganda, and information operations, superiority conveys few advantages; however, the current literature and many of the research participants agree that Russia is at an advantage in the information realm. ¹³¹ This advantage gives Russia the incentive to operate from a position of relative strength in this category by keeping the conflict with the United States at the sub-conventional level in the gray zone.

¹³⁰ Kofman, interview with author, October 23, 2019.

¹³¹ Kofman, interview with author.

Concerning military means that lead to the stability at the nuclear and conventional level, the United States and Russia are equally matched in strategic nuclear forces, which is extremely important when assessing Russia's threat perception and risk calculus. Russia is superior in the category of non-strategic weapons as the United States is outmatched due to its compliance with the INF Treaty from 1987 to 2019. 132 In conventional military means, Russia holds superiority on its borders and in its near abroad but is outmatched beyond that geographic region. As described by Kofman, "Russian thought is that what matters is who is superior during the decisive initial period of war because Russia does not plan to fight past two to three weeks." 133 If the war were fought near Russian borders in Eastern Europe, it would have the advantage. Russia is conventionally dominant within the first days to weeks of a conventional conflict near its border. Russia is at an advantage locally because it can mass forces and employ them quickly in the region. The United States, in particular, and NATO, to a lesser extent, face the challenge of projecting power into the region from a distance. 134 Russia sees this context and timeline as optimal to impose its will on its adversary by damaging critically important targets and maintaining the ability to defend critically important objects to its economy and political system. 135

Beyond the decisive initial period of war, or beyond Russia's near abroad, experts recognize that Russia is outmatched by the United States and NATO. Part of the overmatch comes in the form of military spending and capability as, currently, the United States spends nearly 10 times more than Russia on national defense, including operating 10 aircraft carriers to Russia's one. ¹³⁶ The United States also holds a broad and sweeping

¹³² Kimball and Reif, "Intermediate-Range Nuclear Forces."

¹³³ Kofman, interview with author, October 23, 2019.

¹³⁴ Andrew Tilghman and Oriana Pawlyk, "U.S. vs. Russia: What a War Would Look Like between the World's Most Fearsome Militaries," *Army Times*, October 4, 2015, https://www.militarytimes.com/news/your-military/2015/10/04/u-s-vs-russia-what-a-war-would-look-like-between-the-world-s-most-fearsome-militaries/; Scott Ritter, "NATO Would Be Totally Outmatched in a Conventional War with Russia," Huffington Post, June 7, 2017, https://www.huffpost.com/entry/nato-war-with-russia_b_59381db 9e4b0b13f2c65e892.

¹³⁵ Kofman, interview with author, October 23, 2019.

¹³⁶ Tilghman and Pawlyk, "U.S. vs. Russia."

technological advantage and a "vastly superior" ability to project military, economic, and political power across the globe. 137

While U.S.—Russian nuclear stability is based on parity, conventional stability in this relationship is more complex. Because the United States and NATO maintain conventional superiority in most contexts, Russia has increasingly brandished nuclear escalation threats to keep that conventional advantage checked, eroding the "firewall" between these two levels. More importantly, and ironically, Russia's strategy of avoiding any actions that might trigger conventional conflict aims to bolster a parallel firewall between conventional warfare and gray zone conflict. NATO, up to now, has effectively obliged this Russian strategy by not even brandishing threats of conventional escalation in response to Russian gray zone aggression, let alone undertaking conventional responses. As much as Russia seeks to avoid escalation to conventional warfare it could not win, it is also learning how averse NATO is to threaten such escalation. These respective Russian and NATO postures enhance conventional stability but at the cost of fueling instability at the gray zone level, reflecting a form of the stability—instability paradox familiar in nuclear strategies. How these conditions affect prospects for improving deterrence of Russian gray zone aggression is a focus of the research in this thesis.

The relative match-up of nuclear and conventional forces between Russia and the United States is a major driving factor in Russia's use of the gray zone as its preferred strategy. The subject matter experts agreed that the line-up between the United States and Russia creates a form of relative stability at the nuclear and conventional level; however, modern wars are no longer fought as force-on-force conventional fights. In today's multipolar global security environment, geography, politics, terrain, technology, and the desire to avoid escalating conflict to the potentially devastating conventional or nuclear realm create instability at the sub-conventional level of warfare—particularly in areas in proximity to Russian territory, where Russia prefers to operate in the gray zone.

¹³⁷ Tilghman and Pawlyk.

D. CLARIFYING CONFLICT OR COMPETITION

To further assess Russian strategy, it is important to question the assumptions on which the assessments are based. One such assumption is that the United States and Russia view themselves as currently in conflict. If we hope to understand why Russia is using the gray zone like it is and how the United States can deter those activities, it is crucial to understand whether the countries are in a state of peace or a state of conflict. The nature of the relationship between the states can affect deterrent variables and strategy such as the ability of states to communicate or shape capabilities through arms control agreements.

There is unanimous agreement among the participants interviewed for this research that the United States and Russia are currently in a state of conflict—although some participants preferred the term "intense competition," categorized above traditional statecraft. For example, General David Petraeus states that "though the U.S. and Russia have some common interests, there are also diametrically opposed interests, and Russia is engaged in a variety of activities that are distinctly unfriendly." Leon Panetta, former secretary of defense and CIA director, echoes this view: "It's a fundamental conflict that we have with Russia. During my tenure as the director of the CIA, there was no question that U.S. and Russian relations go beyond competition and into the realm of conflict as we both try to assert ourselves to take advantage of the other." 139

Michael Mazarr, senior political scientist at the RAND Corporation, states, "The gray zone creates a perception of a degree of conflict that goes beyond the gradual, long-term moderated rivalry of great powers, but in reality, the U.S. and Russia are in an intense competition and not conflict." Mazarr also judges that the areas where U.S. and Russian interests conflict are actually quite narrow, and the amount of overall national power that Russia has to undermine these U.S. interests is very modest, leading to his evaluation of a

 $^{^{138}}$ David Petraeus (retired U.S. Army general and former director of the Central Intelligence Agency), interview with author, October 31, 2019.

¹³⁹ Leon Panetta (former secretary of defense, White House chief of staff, and director of the Central Intelligence Agency), interview with author, December 16, 2019.

 $^{^{140}}$ Dr. Michael Mazarr (senior political scientist at the RAND Corporation), interview with author, December 17, 2019.

competitive rather than conflictual relationship. ¹⁴¹ Steven Pifer, former ambassador to Ukraine, also prefers the term competition but believes that the U.S.–Russian relationship is adversarial and not balanced with cooperation as it used to be. ¹⁴² Anthony Cordesman, the Arleigh A. Burke chair in strategy at CSIS, recognizes that the United States and Russia are in conflict but believes the difference between competition and conflict is more of a semantic exercise than an operational distinction. He says, "Yes, we are in conflict, although it varies in intensity and the willingness to use military force to compete in the gray zone." ¹⁴³

This divergence among the experts and even the literature over the term *competition* or *conflict* could, as Anthony Cordesman puts it, be a semantic exercise with little consequence in most venues; however, it matters when discussing the development of strategy toward Russian activity such as the gray zone. 144 The development of strategy must be based on a comprehensive understanding of the relationship between the two states. This question deserves more time, resources, and analytical thought in the future, but for this research, the relationship between the United States and Russia is one considered adversarial, in low-level conflict, and categorized by increased tension, rivalry, and distrust above the level of normal statecraft between two regionally dominant or great power states. This categorization of the relationship most accurately reflects the views of much of the literature and all the subject matter experts interviewed for this research. It also promotes a clear understanding of a decades-long relationship with multiple nuances and provides the opportunity for strategy and policy recommendations.

¹⁴¹ Mazarr, interview with author.

¹⁴² Mazarr, interview with author.

¹⁴³ Mr. Anthony Cordesman (the Arleigh A. Burke chair in strategy at the Center for Strategic and International Studies), interview with author, November 7, 2019.

¹⁴⁴ Cordesman, interview with author.

E. RUSSIA'S GRAY ZONE STRATEGY IN CONTEXT

As established, Russia's perspective and relative standing influence its use of the gray zone as it aims to achieve national objectives from a position of weakness outside its regional near abroad. As Alina Polyakova explains,

Putin is no fool—he understands the limits of Russian capacities and ability to project power. Russia is no match to the United States economically, militarily, or in terms of its appeal to others. This is why the Kremlin has launched a strategy of political warfare against the West in the form of disinformation campaigns, support for far-right political parties in Europe, cyberattacks, money laundering, and other tools of influence that allow Moscow to undermine its perceived adversaries at very little cost. After all, it's cheaper to open an internet troll farm than to build tanks and invest in sustainable economic growth. 145

This section provides some detailed examples of Russia's use of the gray zone to gain leverage against the United States and NATO and forward its national objectives while avoiding a powerful U.S. or NATO response. Although a wide variety of gray zone tactics are described, many of them generally relate to the information space including influence campaigns among ethnic Russian populations, disinformation campaigns, election meddling, and economic sabotage.

In the previous quote, Polyakova is describing the political warfare or information operations portion of Russia's gray zone strategy. The chief of the General Staff of the Armed Forces of Russia, General Valery Gerasimov, envisions the future operational environment as follows:

Less large-scale warfare; increased use of networked command-and-control systems, robotics, and high-precision weaponry; greater importance placed on interagency cooperation; more operations in urban terrain; a melding of offense and defense; and a general decrease in the differences between military activities at the strategic, operational, and tactical levels. 146

¹⁴⁵ Polyakova "New Cold War."

¹⁴⁶ Charles K. Bartles, "Getting Gerasimov Right," *Military Review* 96, no. 1 (2016): 36, Google Books.

This description shows just how complex and intertwined the current security and political environments have become, which has necessitated states like Russia to use gray zone tactics while operating from a position of relative weakness.

Russia's use of non-military means is expansive and includes seeking to influence ethnic Russian populations, which the Russian government describes as sootechestvenniki, or "compatriots." 147 Vera Zakem, Paul Saunders, and Daniel Antoun from the Center for Naval Analyses explain that "Russia's government defines the term compatriots broadly to incorporate not only ethnic Russians and Russian speakers, but also their families as well as others who may have cultural or other connections to the Russian Federation—including its non-Russian ethnic groups—directly or through relatives." 148 Russia has mobilized these groups in a variety of countries in its near abroad including Ukraine, Estonia, Georgia. ¹⁴⁹ Russia uses a compatriot influence strategy to further its larger political goals and leverages information operations, disinformation strategies, and corrupt relationships as critical assets in influencing and molding compatriots. 150 The existence of Russian ethnic populations in other states gives strength and legitimacy to its claim to great power status by showing that the Russian world and influence expands beyond Russian territorial borders. Russian compatriots also act as an amplifying force to Russia's political influence in its near abroad by aligning with Russian culture and ideals. Russia can also use its compatriots to sow unrest in their host state governments such as they did when Russia supported eastern Ukrainian separatists. Russia can also use its compatriots as a rallying point for its domestic and international audience by asserting that it must protect the Russian people wherever they may live. Lastly, Russia can use its compatriots to provide military, political, and economic intelligence and situational awareness.

¹⁴⁷ Vera Zakem et al., *Mobilizing Compatriots: Russia's Strategy, Tactics, and Influence in the Former Soviet Union* (Arlington, VA: Center for Naval Analyses, November 2015), i, https://www.cna.org/CNA_files/PDF/DOP-2015-U-011689-1Rev.pdf.

¹⁴⁸ Zakem et al., i.

¹⁴⁹ Zakem et al.

¹⁵⁰ Zakem et al., ii.

The Russian government also makes efficient use of the information space as a non-military means to achieve its objectives. Russia's ability to generate extensive information campaigns designed to spread *dezinformatsiya* (disinformation) is supported by Russian state media, including Sputnik and Russia Today, not to mention private media and social media around the world, and cyberattacks. ¹⁵¹ A few examples of Russia's use of these tactics include its use of social media to gain influence in Eastern Europe, the use of propaganda to sway compatriots in its near abroad, cyber campaigns against its adversaries, and the spreading of disinformation to "sow dissent against host and neighboring governments, as well as the North Atlantic Treaty Organization and the European Union." ¹⁵² A report on Russia's use of non-military means from the RAND Corporation details how Russia has used cyberattacks on Estonian banks, government entities, and media outlets in 2000, and propaganda and disinformation to support its 2008 invasion of Georgia by creating facts on the ground and justifying its actions with alternative narratives. ¹⁵³

The RAND report also shows that Russia's use of information campaigns and cyber tactics dramatically increased in 2011 after President Vladimir Putin accused the West of sowing discord and unrest in Russia by instigating protests in Moscow. This outward accusation led Putin to declare that he wanted to "break the Anglo-Saxon monopoly on the global information streams." Following this declaration, in 2014, Russia annexed Crimea and sowed unrest in Georgia and Estonia, causing domestic political issues for the states. These operations were enabled by an extensive disinformation campaign that clouded the facts on the ground and created ambiguity surrounding Russia's intentions.

¹⁵¹ Zakem et al., ii.

¹⁵² Keir Giles, "Russia's 'New' Tools for Confronting the West: Continuity and Innovation in Moscow's Exercise of Power," Chatham House, March 21, 2016, https://www.chathamhouse.org/sites/files/chathamhouse/publications/research/2016-03-21-russias-new-tools-giles.pdf.

¹⁵³ Todd C. Helmus et al., *Russian Social Media Influence: Understanding Russian Propaganda in Eastern Europe* (Santa Monica, CA: RAND Corporation, 2018), https://www.rand.org/pubs/research_reports/RR2237.html.

¹⁵⁴ Craig Timberg, "Russian Propaganda Effort Helped Spread 'Fake News' during Election, Experts Say," *Washington Post*, November 24, 2016, https://www.washingtonpost.com/business/economy/ russian-propaganda-effort-helped-spread-fake-news-during-election-experts-say/ 2016/11/24/793903b6-8a40-4ca9-b712-716af66098fe_story. html?utm_term=.82ee94754e1d.

Russia used social media to undermine the trust in the Ukrainian government, mobilize the people, and spread disinformation to demoralize the Ukrainian troops and discredit leadership. In the same RAND report, Helmus et al. explain, "Given the wide presence of Russia in Ukrainian media space and popularity of Russian social networks, Russia was able to actively use social media to mobilize support, spread disinformation and hatred, and try to destabilize the situation in Ukraine." Other tactics used during the annexation of Crimea included direct messaging to Ukrainian soldiers' cell phones. 156

Often, Russia employs multiple disparate gray zone tactics that complement each other and provide a greater chance of success. Some examples include using non-military means such as trojan malware that automatically drives traffic to pro-Russian propaganda on social media, publishing fake pro-Russian foreign policy books by Western authors in Russia, using automated bots to generate complaints against anti-Russian or pro-Western Twitter users, and inventing news stories that are picked up by other states and agencies and run as factual reports. ¹⁵⁷ Other operations range from "disinformation spread by social media trolls and bots, to fake-news sites backed by spurious polls, to forged documents, to online harassment campaigns of investigative journalists and public figures that stand opposed to Russia." ¹⁵⁸ Additional tactics include online "honeypot" accounts, which involve a system designed to entice its targets to interact with it to exploit or compromise American citizens or national security officials in the hope they will provide useful

¹⁵⁵ Helmus et al., Russian Social Media Influence, 16.

¹⁵⁶ Atlantic Council's Digital Forensic Research Lab, "Electronic Warfare by Drone and SMS: How Russia-Backed Separatists Use 'Pinpoint Propaganda' in the Donbas," Medium, May 18, 2017, https://medium.com/dfrlab/electronic-warfare-by-drone-and-sms-7fec6aa7d696.

¹⁵⁷ Rami Kogan, "Bedep Trojan Malware Spread by the Angler Exploit Kit Gets Political," *SpiderLabs Blog*, April 29, 2015, https://www.trustwave.com/Resources/SpiderLabs-Blog/Bedep-trojan-malware-spread-by-the-Angler-exploit-kit-gets-political/; Edward Lucas, "Russia Turned Me into Propaganda," Daily Beast, August 20, 2015, http://www.thedailybeast.com/articles/2015/08/20/ russia-turned-me-into-propaganda.html; Keir Giles, "Russia's 'New' Tools for Confronting the West: Continuity and Innovation in Moscow's Exercise of Power," Chatham House, March 21, 2016, https://www.chathamhouse.org/sites/files/chathamhouse/publications/research/2016-03-21-russias-new-tools-giles.pdf.

¹⁵⁸ Helmus et al., Russian Social Media Influence, 17.

intelligence. ¹⁵⁹ Andrew Weisburd, Clint Watts, and J. M. Berger explain, "All three elements were working together: the trolls to sow doubt, the honeypots to win trust, and the hackers (we believe) to exploit clicks on the dubious links sent out by the first two." ¹⁶⁰

In 2016, Russia used non-military means to interfere in the democratic process of the U.S. presidential election. The U.S. Senate Select Committee on Intelligence conducted an in-depth review of the *Intelligence Community Assessment* produced by the CIA, National Security Agency, and the Federal Bureau of Investigation in January 2017 on Russian interference in the 2016 U.S. presidential election and published its initial findings. Those findings show that Russia utilized "cyber-espionage and cyber-driven covert influence operations, conducted as part of a broader 'active measures' campaign that included overt messaging through Russian-controlled propaganda platforms." ¹⁶¹ Those platforms included "Russia's state-run propaganda machine—comprised of its domestic media apparatus, outlets targeting global audiences such as RT [Russia Today] and Sputnik, and a network of quasi-governmental trolls contributing to the influence campaign by serving as a platform for Kremlin messaging to Russian and international audiences."162 This campaign was an extensive effort by Russian information operations to sow discord in the American population and interfere in the democratic process of the presidential elections. This campaign aimed not only to interfere in the elections for an outcome seen as favorable to Russia but also to undermine the trust of the American people in the security and validity of the democratic process.

More recently, Russia has utilized its cyber capabilities for economic sabotage. In 2017, the Russian government utilized a virus known as NotPetya to disable Maersk, the

¹⁵⁹ Josh Fruhlinger, "What Is a Honeypot? A Trap for Catching Hackers in the Act," CSO, April 1, 2019, https://www.csoonline.com/article/3384702/what-is-a-honeypot-a-trap-for-catching-hackers-in-the-act.html.

¹⁶⁰ Andrew Weisburd, Clint Watts, and J. M. Berger, "Trolling for Trump: How Russia Is Trying to Destroy Our Democracy," War on the Rocks, November 6, 2016, https://warontherocks.com/2016/11/trolling-for-trump-how-russia-is-trying-to-destroy-our-democracy/.

¹⁶¹ Senate Select Committee on Intelligence, *The Intelligence Community Assessment: Assessing Russian Activities and Intentions in Recent U.S. Elections* (Washington, DC: U.S. Congress, July 3, 2018), 2, https://www.intelligence.senate.gov/publications/committee-findings-2017-intelligence-community-assessment.

¹⁶² Senate Select Committee on Intelligence, 5.

world's largest container-shipping company. This company is a key node in global shipping as it traffics 80 percent of the world's trade. ¹⁶³ The virus was subsequently used to disable several other international companies key to the global economy including "an international snack company Mondelez, the U.S. pharmaceutical firm Merck and French, and a construction giant Saint-Gobain." ¹⁶⁴ The effects of the virus caused chaos and widespread financial loss to the tune of approximately \$10 billion. ¹⁶⁵

While this is not a comprehensive account of every gray zone tactic Russia has used, it creates an impression of the breadth and complexity of the gray zone strategy that the United States must consider when deterring actions at the sub-conventional level.

F. CONCLUSION

Nadia Schadlow writes that "by failing to understand that the space between war and peace is not an empty one—but a landscape churning with political, economic, and security competitions that require constant attention—American foreign policy risks being reduced to a reactive and tactical emphasis on the military instrument by default." ¹⁶⁶ Russia has shown determination in weakening the cohesion of the NATO alliance, diminishing U.S. involvement, gaining leverage in Europe, and achieving its strategic goals through use of the gray zone. Russia's deep commitment to its strategic objectives, coupled with its regional balance-of-power advantage and lack of communication and trust with the West, makes it difficult for the United States to deter actions in the gray zone where aggression is difficult to attribute, and actions are short of war. Difficult, but not impossible.

¹⁶³ Andy Greenburg, "The Untold Story of NotPetya, the Most Devastating Cyberattack in History," *Wired*, September 22, 2018, https://www.wired.com/story/notpetya-cyberattack-ukraine-russia-code-crashed-the-world/.

¹⁶⁴ Elisabeth Braw, "From Schools to Total Defence Exercises: Best Practices in Greyzone Deterrence," *Royal United Services Institute Journal* 39, no. 10 (2019): 1, https://rusi.org/sites/default/files/20191115_newsbrief_vol39_no10_braw_web.pdf.

¹⁶⁵ Braw.

¹⁶⁶ Nadia Schadlow, "Peace and War, the Space Between," War on the Rock, August 18, 2014, http://warontherocks.com/2014/08/peace-and-war-the-space-between/>.

III. DETERRENCE

Deterrence depends on altering the adversary's decision calculus by assessing what they value and holding it at risk.

—Retired U.S. Army Lieutenant General Douglas Lute

This chapter details deterrence theory and its evolution since the Cold War to today's complex threat environment. This review of well-established events and analysis is important to ascertain how deterrence concepts are used and understood in the remainder of the chapters, which assess how deterrence can be mapped onto lower levels of conflict characterized by less severe costs. The chapter continues by adapting the most relevant concepts of deterrence to meet the new demands of sub-conventional warfare by exploring how the stability–instability paradox can explain the application of deterrence theory to the sub-conventional level. Lastly, sub-conventional deterrence strategy is analyzed in a contemporary context, applied to Russian gray zone conflict.

A. CORE DETERRENCE CONCEPTS

Bernard Brodie recognizes that deterrence is not a new concept: "The threat of war, open or implied, has always been an instrument of diplomacy by which one state deterred another from doing something of a military or political nature which the former did not wish the latter to do." 167 This message still rings true today in the sense that deterrence is about influencing another actor not to undertake an undesirable behavior. However, the context and environment in which deterrence theory is applied has altered dramatically in recent years. This shift mandates that, at the sub-conventional level, U.S. views on deterrence success need to evolve from zero tolerance of failure to a "cumulative deterrence" notion—that occasional low-level deterrence failure provides an opportunity for response, which in turn enhances the ability to more easily deter similar threats in the future.

¹⁶⁷ Bernard Brodie, "The Anatomy of Deterrence," Document no. 156026 (official research memorandum, U.S. Airforce: Project RAND, 1958), 3.

Deterrence is often described in dichotomous terms such as "to persuade a potential adversary that the risks and costs of his proposed action far outweigh any gains that he might hope to achieve" 168 or the "threat of heavy punishment for an act by the enemy in order to persuade him to desist from that act." 169 Deterrence, in essence, is the power to dissuade, and even though deterrence is often talked about in a military context, it encompasses all aspects of a state's power. Deterrence is also a function of an opponent's total cost–benefit analysis. This is to say that the opponent weighs the cost of the action against the overall benefit, considering its overall objectives, capabilities, and risks, as well as those of its opponent. If an opponent can achieve its objective but in doing so risks a larger cost than one is willing to accept, it can be deterred. Conversely, if an opponent believes that it can achieve its goal with minimal or acceptable costs and risks, it will be difficult to deter that action. This risk calculus is based on the deterring state's ability either to deny its opponents the ability to achieve their objectives or to punish its opponents for taking the action.

It is important to emphasize that deterrence does not exist only in the theoretical arena; it is an art conducted between individuals, or between organizations led by individuals. As such, any successful deterrence strategy must consider the individuals or organizations that one is aiming to deter. What are their motivations? What do they hold dear? How can the United States use that to its advantage? The Department of Defense defines deterrence as "the prevention from action by fear of the consequences. Deterrence is a state of mind brought about by the existence of a credible threat of unacceptable counteraction." This definition highlights that a key aspect of deterrence is a *state of mind* that drives a particular decision, not an arbitrary prescription of certain actions that can be expected to deter any opponent. The art of deterrence focuses on the decision-

¹⁶⁸ Steven Pifer et al., *U.S. Nuclear and Extended Deterrence: Considerations and Challenges*, Arm Control Series, Paper 3 (Washington, DC: Brookings Institution, May 2010), 1, https://www.brookings.edu/wp-content/uploads/2016/06/06_nuclear_deterrence.pdf.

¹⁶⁹ Les Brownlee and Peter J. Schoomaker, "Serving a Nation at War: A Campaign Quality Army with Joint and Expeditionary Capabilities," *Parameters: Journal of the U.S. Army War College* 34, no. 2 (Summer 2004): 7, Google Books.

¹⁷⁰ Department of Defense, *Dictionary of Military and Associated Terms*, Joint Publication 1-02 (Washington, DC: Department of Defense, 2010), 67, https://fas.org/irp/doddir/dod/jp1_02.pdf.

making of at least two living, breathing, thinking individuals, usually national leaders, with their own unique and potentially fluid interests and psychologies.

Deterrence also relies on communication not only between individuals but also within the administration and state governmental system. This is an important consideration in this thesis as much of deterrence theory focuses on organization-level decision-making and challenges of bounded rationality. If the individual or the organizational system of the state perceives or processes a threat incorrectly, deterrence can fail. It is important to consider that motivated biases play a part in communication and can lead an adversary to interpret a state's communication differently from what it intended. Communication relies on understanding the adversary well enough to know its biases. Elaine Bunn explains, "The clarity and credibility of American messages in the mind of the deterree are critical to tailoring deterrence threats. U.S. policymakers need mechanisms to assess how their words and actions are perceived, how they affect each adversary's deterrence calculations, and how they might mitigate misperceptions that undermine deterrence." ¹⁷¹ Russia for example, is extremely hesitant to fully trust what the United States says, so even if Washington communicates a credible threat and has the necessary resolve to follow through on it, Russia is likely to discount either U.S. capabilities or resolve. Russia's tendency to exaggerate its capability and resolve might indicate that it is prejudiced to believe that all states exaggerate when communicating.

Audience costs, as described by James Fearon, can be used to bolster the credibility of a threat when communicating to an adversary if it is made clear that failure to follow through on the threat will undermine the political standing of a leader. This is especially true for democracies in which maintaining a positive public opinion is essential to maintaining power. Fearon finds, "Regardless of the initial conditions, the state more sensitive to audience costs is always less likely to back down in disputes that become public contests." This inability to back down from a threat without suffering severe audience

¹⁷¹ Elaine Bunn, "Can Deterrence Be Tailored?," *Strategic Forum*, no. 225 (January 2007), 1, https://www.hsdl.org/?view&did=481759.

¹⁷² James D. Fearon, "Domestic Political Audiences and the Escalation of International Disputes," *American Political Science Review* 88, no. 3 (September 1994): 577. https://doi.org/10.2307/2944796.

costs bolsters the credibility of the threat and therefor deterrence. Douglas Lute, retired U.S. Army lieutenant general and former United States permanent representative to the North Atlantic Treaty Organization, observes that deterrence depends on altering the adversary's decision calculus by assessing what it values and holding it at risk. ¹⁷³ Michael Kofman, director of the Russia Studies Program at the Center for Naval Analyses echoes this theme by expressing that even though deterrence can be difficult in particular situations, it is always possible because deterrence, at its root, is a psychological interaction with another person. ¹⁷⁴

B. THE COMPONENTS OF DETERRENCE

Deterrence comprises three essential components: capability, resolve, and communication. These elements are interdependent, as all three must be present for deterrence to be successful. It is important to understand each component individually and how all three work together slightly differently at each level of warfare including a zero-tolerance nuclear environment and an alternative sub-conventional environment. First, Snyder writes that deterrence depends on "any form of control which one has over opponents present prospective 'value inventory." This capability includes holding political or military leverage over an opponent's material assets, political influence and standing, and anything that the state considers valuable to its survival and prosperity. In modern deterrence theory, this has been labeled the *capability requirement* of deterrence.

Second, Snyder argues that deterrence depends on "the opponent's degree of confidence that one intends to fulfill the threat or promise." The intention to fulfill a threat is known as "resolve," and it is evaluated from the opponent's view of the state's will to use the capability and make good on the deterrent threat. Thomas Schelling notes

¹⁷³ Lute, interview with author, November 26, 2019.

¹⁷⁴ Kofman, interview with author, October 23, 2019.

¹⁷⁵ Schelling, *Arms and Influence*; Brodie, *The Atomic Bomb and American Security*; Snyder, *Deterrence and Defense*.

¹⁷⁶ Snyder, Deterrence and Defense, 10.

¹⁷⁷ Snyder, 10.

that "there are threats that a state would rather not fulfill, and weakness in deterrence can emerge when an aggressor believes the defender will ultimately prove unwilling to carry out its threats." Schelling notes that maintaining resolve is difficult because it is based on the adversary's view of a state's willingness to follow through with a threat. Even if the defending state is fully prepared to execute the threat, it still must convince the aggressor of its resolve.

Discussing the third element of deterrence, Snyder argues that deterrence can only be achieved if an actor is able to effectively communicate "a credible threat or promise to decrease or increase the value inventory." ¹⁷⁹ A state's ability and resolve to use its capabilities to follow through with a deterrent threat or demonstrate the ability to deny an adversary's intended goal are effectively useless if the state cannot communicate that to its adversary. Communication is more than just stated red lines; it must reflect the adversary's biases and the prospect that the adversary will understand the communication as intended. Bunn explains, "Deterrence requires detailed knowledge of the society and leadership that we seek to influence. U.S. decisionmakers will need a continuing set of comprehensive country or group deterrence assessments, drawing on expertise in and out of government, in order to tailor deterrence to specific actors and specific situations." ¹⁸⁰ Communication should be viewed from the adversary's perspective, which requires knowing the adversary's preconceptions, history, and tendencies to trust or distrust the actor wishing to deter. A state can also communicate through action including military exercises, demonstrations of capabilities, actions that reinforce a state's commitment, declaratory policy, punitive actions for undesirable behavior, and the lifting of punishment for compliance. Communication is the cornerstone of deterrence; without it, capabilities are just hardware with no intent, and a nation's resolve is not credible.

An aspect of deterrence that can assist in affecting an adversary's view of a state's resolve is brinksmanship. Brinksmanship is an "aspect of foreign policy practice in which

¹⁷⁸ Thomas Schelling, *The Strategy of Conflict* (Cambridge, MA: Harvard University Press, 1980), 123.

¹⁷⁹ Snyder, Deterrence and Defense, 10.

¹⁸⁰ Bunn, "Can Deterrence Be Tailored?," 1.

one or both parties force the interaction between them to the threshold of confrontation in order to gain an advantageous negotiation position over the other." This aspect of deterrence assists in generating credibility of the threat—not whether the state has the capability but rather the political and moral will to use the capability. Thomas Schelling describes this as "the threat that leaves something to chance." The ambiguity and risk of escalation that brinkmanship provides can assign credibility to an otherwise unlikely threat. The United States and Russia have both proven their willingness to use this strategy despite the risks as seen during the Cuban Missile Crisis. Both the United States and Russia issued threats of nuclear use with increased force and risk without qualifying their resolve to act on the threats.

A complementary and essential piece of deterrence is a negative security assurance which requires a state to show restraint to shape an adversary's decision calculus. Thomas Schelling explains that "the pain and suffering have to appear contingent on behavior; it is not alone the threat that is effective, the threat of pain or loss if he fails to comply, but the corresponding assurance, possibly an implicit one, that he can avoid the pain or loss if he does comply." For example, in the 2018 *Nuclear Posture Review*, the Department of Defense expresses negative security assurances by stating that the United States "will not use or threaten to use nuclear weapons against non-nuclear weapons states that are party to the NPT [Nuclear Non-Proliferation Treaty] and in compliance with their nuclear non-proliferation obligations," maintaining a feature introduced in the preceding 2010 Nuclear Posture Review. The success or failure of negative security assurance rests on the communication component of deterrence. If a state cannot effectively communicate its resolve to both the threat and the guarantee of relief from punishment, the adversary has no reason to cease the behavior or alter its decision calculus. Only with successful

^{181 &}quot;Nuclear Weapons, Brinkmanship, and Deterrence," Stanford University, accessed February 19, 2020, https://web.stanford.edu/~imalone/Teaching/pols114/AddendumNuclearDeterrenceGameTheory.pdf.

¹⁸² Schelling, *The Strategy of Conflict*, 187.

¹⁸³ Schelling, Arms and influence.

¹⁸⁴ Department of Defense, *Nuclear Posture Review* (2018), 21. See also Department of Defense, *Nuclear Posture Review Report* (Washington, DC: Department of Defense, April 2010), 15, https://dod. defense.gov/Portals/1/features/defenseReviews/NPR/2010_Nuclear_Posture_Review_Report.pdf.

communication of a credible resolve both to punish and assure security will deterrence succeed.

When applying deterrence, an actor must consider both its own and its adversary's vital interests. In another publication, the Department of Defense suggests that deterrence may "convince adversaries not to take actions that threaten U.S. vital interests by means of decisive influence over their decision-making." Bernard Brodie identifies U.S. vital interests as being linked to the standing of the United States as a status quo power. Brodie explains that the United States is determined to keep the territory and influence that it holds and maintain a world order in which "half [of the world] or more is friendly or at least not sharply and perennially hostile." This analysis shows that U.S. vital interests center around the necessity to maintain not only U.S. national security but also the national security of allies and partners that go toward making up the current advantageous world order, particularly in Western Europe. The United States protects its vital interests by "asserting decisive influence through credibly threatening to deny benefits and/or impose costs, while encouraging restraint by convincing the actor that restraint will result in an acceptable outcome." 188

C. DETERRENCE APPROACHES

Classic literature on deterrence further defines the theory by dividing approaches into two categories: deterrence by denial and deterrence by the threat of punishment. It is critical to understand the distinction between the two approaches and that a Cold War model of zero tolerance tends to rely too heavily on deterrence by threat of punishment, when today's dynamic environment demands the flexibility of a balanced approach. Robert Jervis argues, "We must maintain the conceptual clarity provided by the distinctions

¹⁸⁵ Department of Defense, *Deterrence Operations Joint Operating Concept*, version 2.0 (Washington, DC: Department of Defense, December 2006), 3, https://www.jcs.mil/Portals/36/Documents/Doctrine/concepts/joc_deterrence.pdf?ver=2017-12-28-162015-337.

¹⁸⁶ Bernard Brodie, "The Anatomy of Deterrence." World Politics 11, no. 2 (January 1959): 173, https://doi.org/10.2307/2009527.

¹⁸⁷ Brodie.

¹⁸⁸ Department of Defense, Deterrence Operations, 3.

between deterrence by denial and deterrence by punishment." ¹⁸⁹ This distinction gives deterrent strategy at the sub-conventional level the flexibility and layering required to successfully deter low-level conflict where the threat of nuclear use is not credible. Liddell Hart explains, "There is an urgent need of a better kind of deterrent that does not impale us on the horns of the dilemma 'Suicide or Surrender.' It must be a more workable kind of deterrent—one that could be put into operation as a defence, against anything less than allout attack. The better it is as a defence, in a non-suicidal way, the surer it promises to be as a deterrent." ¹⁹⁰

Deterrence by denial is executed when an "actor elects not to undertake an action due to its belief a second party has taken, or will take, steps to ensure this action will fail to achieve its desired result." Michael Mazarr explains, "Deterrence by denial strategies seek to deter an action by making it infeasible or unlikely to succeed, thus denying a potential aggressor confidence in attaining its objectives." Deterrence by denial is the act of defending an actor's value inventory with the capabilities that it has, which in turn prevents the aggressor from reaching its intended goal or creates enough doubt about the prospect of success that the aggressor declines to attempt an action altogether. Patrick Morgan explains, "Deterrence and defense are analytically distinct but thoroughly interrelated in practice." Deterrence by denial can be achieved through military capabilities or other forms of state power that create a favorable balance-of-forces equation in a region; however, it is not the only way to achieve deterrence by denial. A favorable balance of forces acts as a deterrent through denial in the sense that it physically prevents an adversary from achieving its objective, but even if the balance of force is not overwhelming, deterrence can be achieved by altering the adversary's decision calculus to

¹⁸⁹ Robert Jervis, "Strategic Theory: What's New and What's True," in *The Logic of Nuclear Terror*, ed. R. Kolkowicz (Boston: Allen & Unwin, 1987), 50.

¹⁹⁰ B. H. Liddell Hart, *Deterrence or Defence* (London: Stevens & Sons, 1960), Google Books.

¹⁹¹ Department of Defense, *Dictionary of Military and Associated Terms*, 107; Department of Defense, *Deterrence Operations*.

¹⁹² Mazarr, interview with author, December 17, 2019.

¹⁹³ Patrick M. Morgan, *Deterrence: A Conceptual Analysis*, 2nd ed. (Beverly Hills: Sage Publications, 1983), 32.

believe that the chances of success are limited or reduced, making the action undesirable or not worth the effort.

Deterrence by punishment occurs when "a geopolitical actor elects not to undertake a particular action due to its fear the action will trigger a response from a second party capable of imposing unacceptable costs against it." 194 The goal of deterrence by punishment is to alter the opponent's decision calculus so that it believes the cost for the action is not worth the potential reward—even if it achieves its first objective. Deterrence by punishment aims not to defend value assets or deny an action but to raise the cost of a potential adversarial action. Mazarr explains that deterrence by punishment can extend to include a nuanced use of all elements of state power while denial strategies tend to threaten "severe penalties, such as nuclear escalation or severe economic sanctions, if an attack occurs." 195 It is the fear of the cost of an action, in any category of DIME, that can change an adversary's cost-benefit analysis depending on what it values. If an actor can ascertain what its opponent values and hold it at risk of punishment, the actor has a strong basis for deterrence. Bunn explains, "The capabilities needed for tailored deterrence go beyond nuclear weapons and the strategic capabilities of the so-called New Triad, to the full range of military capabilities, presence, and cooperation, as well as diplomatic, informational, and economic instruments."196

D. RESIDUAL COLD WAR INFLUENCE

All prominent theories of deterrence depend heavily on the Cold War model of conflict between the United States and the Soviet Union in which both sides understood that any deterrence failure was unacceptable. ¹⁹⁷ This model of zero tolerance of deterrence failure is appropriate when the aim is to deter the use of such highly destructive forces as

¹⁹⁴ Justin V. Anderson, Jeffrey A. Larsen, and Polly M. Holdorf, *Extended Deterrence and Allied Assurance: Key Concepts and Current Challenges for U.S. Policy*, INSS Occasional Paper 69 (Colorado Springs: U.S. Air Force Academy, September 2013), https://www.usafa.edu/app/uploads/OCP69.pdf.

¹⁹⁵ Michael Mazarr, "Understanding Deterrence" (Santa Monica: RAND Corporation, 2018), 2, https://www.rand.org/content/dam/rand/pubs/perspectives/PE200/PE295/RAND_PE295.pdf.

¹⁹⁶ Bunn, "Can Deterrence Be Tailored?," 1.

¹⁹⁷ Brodie, "The Anatomy of Deterrence."

nuclear weapons. A single failure of deterrence at this strategic level would be costly for the aggressor, the recipient, and the international security architecture that operates on norms of behavior, and as such, the threshold for nuclear use must be kept very high—such as to ensure state survival.

Since the end of the Cold War and the collapse of the Soviet Union, a classic zero-tolerance model of deterrence has been expanded beyond the United States and Soviet Union to include seven additional states: the United Kingdom, France, China, India, Pakistan, North Korea, and Israel. ¹⁹⁸ It is important to recognize that of the additional states, only the United Kingdom, France, and China (in addition to the United States and Russia) are recognized as legal nuclear weapon states by the NPT. India, Pakistan and Israel never joined the NPT; North Korea signed the treaty but has never been in full compliance and has subsequently withdrawn. India, Pakistan, and North Korea all built nuclear weapons and deterrence publicly into their military postures after the NPT came into force.

Though nuclear deterrence today enables these states to meet similar security needs, the deterrence relationship built and maintained by the United States and Russia sets the tone for the global nuclear deterrent architecture and norms, and lays the foundation for the global nonproliferation regime. According to the Stockholm International Peace Research Institute, in 2019, the world inventory of nuclear weapons totaled 13,865, with 3,750 deployed as operational forces. 199 More than 90 percent of that total is owned by the United States and Russia. 200 The norm of nuclear non-use, or as Nina Tannenwald

¹⁹⁸ Most open-source reporting categorizes Israel as a nuclear weapon state. However, Israel maintains ambiguity about its program and has never publicly declared having nuclear weapons or tested a weapon. It is outside of the scope of this research to confirm or deny Israel as a nuclear weapon state. Nevertheless, because Israel's neighbors believe it is a nuclear weapons state, nuclear deterrence dynamics are equivalently present in its security relationships.

¹⁹⁹ Stockholm International Peace Research Institute, *SIPRI Yearbook 2019: Armaments, Disarmament and International Security* (Stockholm: Stockholm International Peace Research Institute, 2019), 10, https://www.sipri.org/sites/default/files/2019-06/yb19_summary_eng_1.pdf.

²⁰⁰ Kelsey Reichmann, "Here's How Many Nuclear Warheads Exist, and Which Countries Own Them," Defense News, June 16, 2019, https://www.defensenews.com/global/2019/06/16/heres-how-many-nuclear-warheads-exist-and-which-countries-own-them/; "Global Nuclear Arsenal Declines, but Future Cuts Uncertain amid U.S.-Russia Tensions," Radio Free Europe/Radio Liberty, June 17, 2019, https://www.rferl.org/a/nuclear-weapons-russia-start-inf-warheads/30003088.html.

describes it, the "nuclear taboo," aids in explaining why classic deterrence has been effective since 1945.²⁰¹ Tannenwald states, "A normative prohibition on nuclear use has developed in the global system, which, although not (yet) a fully robust norm, has stigmatized nuclear weapons as unacceptable weapons of mass destruction."²⁰² The threat of nuclear retaliation to nuclear use is largely considered reasonable, even credible, making deterrence of other nuclear states stable at the strategic nuclear level.

E. THE EXTENSION OF DETERRENCE

The current security environment has expanded beyond the dichotomy of the Cold War to a multipolar world including multiple nuclear weapons states and an alliance system that has fundamentally changed the structure of deterrence. As Bunn argues, "Deterrence, the hallmark of Cold War–era security, needs to be adapted to fit the more volatile security environment of the 21st century." In the extension of deterrence beyond nuclear parity, there are three characteristic conditions of the post–Cold War era that require consideration and shape the challenges of creating a modern approach. Together, the taboo against nuclear use, the stability–instability paradox, and extended deterrence create complications that must be addressed.

1. Nuclear Taboo

Using classic deterrence theory, which relies on nuclear weapons to deter a threat at the conventional or sub-conventional level, is likely to fail due to a lack of credibility in the resolve to use such a disproportional and catastrophic weapon. History has shown that non-nuclear states are willing to attack a nuclear armed state in large part because the threat of nuclear retaliation for a conventional attack is not credible. Tannenwald provides examples of this: "China attacked U.S. forces in the Korean War, North Vietnam attacked U.S. forces in the Vietnam War, Argentina attacked Britain in the Falklands in 1982, and

²⁰¹ Nina Tannenwald, "The Nuclear Taboo: The United States and the Normative Basis of Nuclear Non-Use," *International Organization* 53, no. 3 (1999): 433–68, https://doi.org/10.1162/002081899550959.

²⁰² Tannenwald, "The Nuclear Taboo," 433.

²⁰³ Bunn, "Can Deterrence Be Tailored?," 1.

Iraq attacked U.S. forces and Israel in the 1991 Persian Gulf War." ²⁰⁴ Nuclear retaliation against a non-nuclear aggressor is unacceptable to domestic or international populations. Tannenwald explains, "Knowledge of a widespread normative opprobrium against nuclear use may have strengthened expectations of non-nuclear states that nuclear weapons would not be used against them." ²⁰⁵ Furthermore this expectation is codified in both U.S. and Russian doctrine in which both states indicate "that they will not use nuclear weapons against non-nuclear weapon states that comply with the NPT." ²⁰⁶ This nuclear taboo along with the grave repercussions of using a nuclear weapon for anything less than state survival or nuclear retaliation prevents classic nuclear deterrence, which has a zero-failure model, from being effectively transposed to the lower levels of conflict such as the conventional and sub-conventional level of gray zone conflict. The norm of non-use is not present below the strategic nuclear level. Conventional and sub-conventional weapons and tactics are common practice and do not encounter the normative restrictions and ramifications that nuclear weapons do, which causes a zero-failure strategic level deterrence model to fail at lower levels of conflict, where the cost is lower and the use is acceptable.

2. Stability–Instability Paradox

Nuclear weapons do have a role, however, in affecting deterrence dynamics at lower level and even gray zone conflict. In 1954, B. H. Liddell Hart estimated that "to the extent that the H-bomb reduces the likelihood of full-scale war, it increases the possibility of limited war pursued by widespread local aggression." Glenn Snyder described the stability–instability paradox as follows: "the greater the stability of the 'strategic' balance of terror, the lower the stability of the overall balance at lower levels of violence." When

²⁰⁴ Tannenwald, "The Nuclear Taboo."

²⁰⁵ Tannenwald, 434.

²⁰⁶ Department of Defense, *Nuclear Posture Review Report*, 2010.

²⁰⁶ Department of Defense, 15.

²⁰⁷ Liddell Hart, Deterrence or Defence, 23.

²⁰⁸ Glenn Snyder, "The Balance of Power and the Balance of Terror," in *The Balance of Power*, ed. Paul Seabury (San Francisco: Chandler, 1965), 184–201, quoted in Christopher J. Watterson, "Competing Interpretations of the Stability–Instability Paradox: The Case of the Kargil War," *Nonproliferation Review* 24, no. 1–2 (2017): 83–84, https://doi.org/10.1080/10736700.2017.1366623.

applying this paradox to the United States and the Soviet Union, Snyder assesses that "the Soviets probably feel, considering the massive retaliation threat alone, that there is a range of minor ventures which they can undertake with impunity, despite the objective existence of some probability of retaliation." Nuclear weapons and classic deterrence keep nuclear states stable in a mutually assured destruction framework. This dynamic stabilizes the states at the nuclear level and pushes aggression to the conventional level.

This stability allows states to compete at the conventional level while having a moderating effect on the adversary's decision calculus. When an adversary calculates decisions, nuclear weapons factor into a "whole war" or "total cost-gain" expectation. ²¹⁰ An adversary does not want to take an action at the conventional level that could reasonably be expected to escalate the conflict and incur a devastating cost at the strategic nuclear level. Thus, nuclear weapons may moderate the types or intensity of action between states at the conventional level. But, conversely, if an adversary reasonably expects that an action at the conventional level will not escalate the conflict—precisely because of that devastating cost at the strategic nuclear level—then strategic nuclear stability has little conventional deterrence benefit and may instead incite certain forms of conventional aggression that serve brinksmanship strategies. That is the stability–instability paradox: nuclear weapons always factor in via a "whole war" perspective, but how they factor in may be perverse.

3. Extended Deterrence

A critical component of adapting deterrence from the Cold War era to today's environment was the construction of the alliance system after World War II that gave strength and enhanced power projection to the United States and its Western allies and partners. As the Soviet Union sought to erode or threaten the alliance, the strategy of extended deterrence, "the ability of U.S. military forces, particularly nuclear forces, to deter attack on U.S. allies and thereby reassure them," was born out of necessity.²¹¹ The United

²⁰⁹ Snyder, Deterrence and Defense, 226.

²¹⁰ Snyder.

²¹¹ Pifer et al., U.S. Nuclear and Extended Deterrence, 1.

States extended nuclear deterrence to U.S. allies during the Cold War to enhance collective security against the Soviet Union. Nuclear extended deterrence created a stabilizing effect in the broader U.S. alliance system by inserting the severe consequences of nuclear use into the decision-making calculus of the Soviets for engagement or interference with U.S. allies. ²¹² After the end of the Cold War and the fall of the Soviet Union, the United States allowed the emphasis on deterrence to wane as the it prioritized terrorism over great power competition.

Today, as the strategic environment shifts from the post–Cold War era, new threats to the United States emerge on multiple levels of conflict, causing the need for a strengthened and tailored deterrence strategy extending down to the lowest levels of conflict. Since U.S. extended deterrence is a security guarantee of the U.S. nuclear umbrella to allies such as NATO member states, Japan, and South Korea, the principles of classic deterrence apply with the caveat that the credibility of the nuclear threat is more strained. The idea that the United States would use nuclear weapons to defend the homeland against an existential threat is easily credible. However, the notion that the United States would use strategic nuclear weapons to defend another state and risk retaliation on the U.S. homeland for anything other than nuclear use is a harder threat to make credible. This issue of credibility has been exaggerated even further with Russia's use of gray zone tactics that fall below the level of armed conflict and conventional war. These strategies rely on operating at a level below the threshold for conventional military response, therefore reducing the credibility of a retaliatory threat by the United States.

Among the subject matter experts interviewed for this research, opinions on whether Russian gray zone conflict threatened U.S. extended deterrence were mixed. One set of interviewees was more optimistic and expressed that Russian gray zone operations are not undermining U.S. extended deterrence because they exist above the subconventional level of the gray zone. These experts referenced actions that the United States and NATO have taken since Russia began increasing its gray zone activities that have bolstered extended deterrence. Experts such as Douglas Lute cite NATO force structure

²¹² North Atlantic Treaty Organization, "Why Was NATO Founded?"

revisions and the bolstering of deterrence credibility through the communication of capabilities and resolve by inviting Russian observers to exercises in the region.²¹³ Brad Roberts described how Russian gray zone conflict has bolstered U.S. extended deterrence by congealing the will of NATO allies around collective defense against Russia's continued attempts to undermine NATO member states' interests.²¹⁴

A second group of interviewees were less optimistic and expressed concern that Russian gray zone operations are potentially eroding the credibility of the will of the United States to fulfill its extended deterrence commitments. David Holloway argues that U.S. extended deterrence relies on the credibility of the U.S. and European response to Russian actions, positing that the responses taken thus far might embolden Russia to push the limit to see just how far outside the gray zone it can operate before inciting a U.S. response.²¹⁵ This is not to suggest a full-fledged conventional attack; however, it does suggest that Russia is attempting to push the boundaries of what is considered gray zone operations, and U.S. responses to these actions will serve to define their limits. David Petraeus, former CIA director, emphasizes that although Russian gray zone operations might undermine U.S. extended deterrence, the conventional view of extended deterrence still exists at the conventional and nuclear level where Russia and the United States are relatively stable.²¹⁶ Although there is cause for concern that Russian gray zone actions might erode the credibility of U.S. extended deterrence through attempts to fracture the U.S.-NATO relationship or the NATO alliance itself, the general sense among the subject matter experts is that the threat of collective retaliation is seen as credible by Russia and that the U.S. extended deterrence guarantee remains firmly in place with respect to the United States and NATO member states.²¹⁷

²¹³ Lute, interview with author, November 26, 2019.

²¹⁴ Dr. Brad Roberts (director of the Center for Global Security Research at Lawrence Livermore National Laboratory and former deputy assistant secretary of defense for nuclear and missile defense policy), interview with author, October 18, 2019.

²¹⁵ Dr. David Holloway (senior fellow emeritus at Stanford University's Freeman Spogli Institute of International Studies), interview with author, November 14, 2019.

²¹⁶ Petraeus, interview with author, October 31, 2019.

²¹⁷ See Appendix A for a list of the author's interviews between October and December 2019.

F. ADAPTING DETERRENCE TO NEW DEMANDS

As discussed in the previous section, classic zero-tolerance nuclear deterrence fails at the sub-conventional level due to a lack of credibility in threatening nuclear retaliation for gray zone activity. This section first assesses the value of adapting conventional deterrence to apply to the sub-conventional level. The analysis suggests that conventional deterrence is promising and, in some regards, likely to be successful but ultimately insufficient as a sole approach to deter gray zone conflict. Additional means and mechanisms are then considered for supplementing the use of conventional deterrence for the gray zone.

1. Conventional Deterrence as an Alternative to Classic Deterrence

Although overarching theories and specific tenets of deterrence strategies are suited to the sub-conventional level, it is still unclear how best to deter such activity. Brodie's overarching premise, that deterrence is "one state deterring another from doing something of a military or political nature which the former did not wish the latter to do," can be applied to the gray zone. However, it is fundamentally harder to deter actions at the sub-conventional level when gray zone actions offer a low cost and high reward. The use of a conventional retaliatory strike for such low-level conflict is not credible or could be highly escalatory. Credibility is even further eroded in the gray zone when compounded by the ambiguous and deniable nature of Russia's actions; if Russia believes it can escape attribution for its actions, retaliatory threats will be less meaningful. It is difficult to gain support from a domestic or international audience for punishment or denial actions against Russia when it has done the preparatory work to shape or create the facts on the ground and an information campaign to control the narrative that skews the ability of any other nation to directly tie the Russian government to the event.

Steven Pifer posits—referring to Russia's denial of services attacks in Estonia in 2007 and Georgia in 2008 and fait accompliannexation of Crimea in 2014—that nuclear (classic) deterrence has failed and that conventional deterrence could be suited to the gray

²¹⁸ Brodie, "The Anatomy of Deterrence," 3.

zone, although not perfectly.²¹⁹ Pifer believes that conventional deterrence might be extended to the sub-conventional level (gray zone), and it is essential to assess the merit of that assumption. The following assessment relies on Michael Gerson's structure of the three interrelated components on which conventional deterrence relies. To some extent, each of the three components can be adapted for use at the sub-conventional level; however, two components need adapting or supplementing to succeed in the gray zone.

The first component establishes that "states contemplating conventional aggression typically seek relatively quick, inexpensive victories." ²²⁰ This is also true for states like Russia in the gray zone, which seek high reward and low-cost strategies. This first tenet of conventional deterrence adapts well to the sub-conventional level as it describes the nature of sub-conventional warfare where states can test tactics quickly as opportunities arise for limited cost, even if the tactic fails.

The second component is that "conventional deterrence is primarily based on deterrence by denial, the ability to prevent an adversary from achieving its objectives through conflict." ²²¹ In an interview conducted for this thesis, Douglas Lute expressed that deterrence of sub-conventional warfare must rely on both deterrence by denial and deterrence by punishment because of the ability for Russia's autocratic regime to quickly take advantage of opportunities through expedient implementation of gray zone capabilities such as cyber, information warfare, or proxy forces in the geographic area. ²²² These tactics can be employed well before the United States can defend or deny an action, thus relying on deterrence by punishment after the event. When deterrence by denial fails, it is imperative that a state is prepared to apply previously threatened punishment to give

²¹⁹ Mr. Steven Pifer (nonresident senior fellow in the Arms Control and Non-Proliferation Initiative and the Center on the United States and Europe at the Brookings Institution), interview with author, October 25, 2019.

²²⁰ Michael Gerson, "Conventional Deterrence in the Second Nuclear Age," *Parameters: Journal of the U.S. Army War College* (October 2009): 37, https://mca-marines.org/wp-content/uploads/Conventional-Deterrence-in-the-2nd-Nuclear-Age-by-Gerson-090901.pdf.

²²¹ Gerson, 37.

²²² Lute, interview with author, November 26, 2019. It is worth noting that the term "near abroad" is a Russian term that has been adopted by many U.S. scholars; however, it can be detrimental to countries in that geographical region to accept the term without recognizing its implications for them.

the adversary pause in its decision calculus and sustain the credibility of deterrence by punishment concerning future similar events.

The ability to accept that deterrence by denial may fail and respond in a timely manner with a proportionally scaled response gives credibility to the overall deterrence posture at each level of warfare. Even if the United States uses its strength of the allied system to preposition forces able to counter Russia's ability to rapidly employ gray zone tactics and deny the benefits of its actions, there still must be a related threat of punishment. Furthermore, if the United States or its allies do not have prepositioned forces or capabilities in an area to deny Russian gray zone actions, deterrence would rely on an effective threat of punishment of the action after the fact. This need for both deterrence by denial and deterrence by punishment translates to this tenet being partially transposable to the sub-conventional space, but only with the addition of a denial-by-punishment strategy to accompany it.

The third component is that "the 'local' balance of military power—the balance between the conventional forces of the attacker and those of a defender in the area of conflict—often plays a critical role in conventional deterrence, since it is local forces that will impact an aggressor's calculations regarding a quick victory."²²³ The third component of conventional deterrence is directly transposable to sub-conventional deterrence, albeit with a few caveats and modifications based on the level of gray zone action that the United States seeks to deter. The local balance of power in Russia's near abroad plays a critical role in the overall deterrence relationship between the United States and Russia because Russia has the local balance-of-power advantage. However, an emphasis on the local balance of power is much more suited to higher levels of sub-conventional warfare such as proxy forces, clandestine operations, and cyberattacks that create physical conditions.

Russia knows that it can conduct operations in the region faster than the United States or NATO can respond, and it uses the unreliability of the threat of response to its advantage. Russia's ability to move forces and capabilities to regions in its near abroad or homeland territory greatly exceeds that of the United States or NATO to move forces or

²²³ Gerson, "Conventional Deterrence in the Second Nuclear Age," 38.

capabilities into the area due to the tyranny of distance and Russia's anti-access and area denial (A2AD) defensive systems. These systems would need contending with in a conventional setting. Although, as Michael Kofman points out, the capabilities of Russia's A2AD systems have been overinflated, the inflamed discourse and hype around this capability could affect NATO's decision calculus and prevent or delay a response to Russian actions in the near abroad. NATO and U.S. decisions to respond to Russian aggression take time given the required consensus of stakeholders, and this gives Russia the advantage under a conventional deterrence model.

The local balance of military power in Russia's near abroad has a dramatic effect on gray zone deterrence due to Russia's ability to influence its near-abroad neighbors with propaganda, proxy forces, cyber, and economic manipulation, which are supported by the looming threat of conventional aggression and coercion from a powerful and geographically close neighbor. States in the region have the choice of balancing against Russia by joining NATO (if they are invited) or allying with Western powers without NATO membership, as Ukraine did. However, these states are still regionally located near Russia and know that the United States and NATO would have to decide, first, to come to their aid and, second, to cross the tyranny of distance required to deliver that aid and support. A state such as Russia can do a great deal of damage in either the sub-conventional or the conventional realm in the amount of time that it would take for Western powers to infill support. The second option for these states is to bandwagon with Russia, which would require them to align with an oppressive regime, losing some of their sovereignty in exchange for relief from Russian aggression.

At first glance, a conventional deterrence strategy seems to fit the bill for deterring gray zone activity. Conventional deterrence has certainly been bolstered by recent U.S. and NATO actions; however, it is still an incomplete strategy for deterring gray zone activity at the sub-conventional level. A conventional deterrence strategy has some theoretical and practical challenges when it is transposed to the sub-conventional level, particularly threat

²²⁴ Michael Kofman, "It's Time to Talk About A2AD: Rethinking the Russian Military Challenge," War on the Rocks, September 5, 2019, https://warontherocks.com/2019/09/its-time-to-talk-about-a2-adrethinking-the-russian-military-challenge/.

credibility, and Russia's ability to quickly employ gray zone strategies when the opportunity arises without intelligence warning or the ability to deny the outcome. Russia has the balance-of-power advantage in the region, conducts swift fait accompli operations, and uses proxy and surrogate forces to avoid attribution that the United States could use to justify retaliation and bolster the credibility of its threats.

2. Applying Deterrence in the Context of Russian Behavior

This section builds on the previous assessments and explores the application of deterrence theory at the sub-conventional level in the specific context of Russia as a state actor and its use of a gray zone strategy. It considers the value of tailoring a deterrent strategy against Russian gray zone conflict by supplementing conventional deterrence with "cumulative deterrence." Recall that any deterrence strategy relies on sufficient capabilities, solid resolve, and strong communication of a threat, which in turn create credibility. Cumulative deterrence, elaborated in the following paragraphs, introduces the idea that credibility can be sustained across multiple encounters even if deterrence fails in certain instances, vis-à-vis classic zero-tolerance nuclear deterrence.

Regarding tailoring deterrence, Bunn writes, "If deterrence is about influencing the perceptions—and ultimately, the decisions and actions—of another party, it is logical that the requirements for deterrence will differ with each party that we might try to deter and may well differ in each circumstance or scenario."²²⁶ Adapting deterrence to the subconventional level requires an understanding of the unique relationship between the states to identify the relative stability and instability that can inform deterrence strategy.

The stability-instability paradox applies to the nuclear and conventional level, and indeed, Russia's effort to avoid conventional-level warfare with the United States strengthens stability between the states at the conventional level similar to the strategic nuclear level. While U.S.–Russian nuclear stability is based on parity, conventional stability in this relationship is more complex. As shown in Chapter II, Russia has a strong

²²⁵ Brodie, "The Anatomy of Deterrence,"

²²⁶ Bunn, "Can Deterrence Be Tailored?," 3.

aversion to conflict with the United States and NATO at the conventional level. Russia would be outmatched in military superiority after two to three weeks of conflict and beyond its near abroad and, thus, prefers to operate at the sub-conventional level below the threshold of armed conflict. 227 In effect, Russia's strategy of avoiding any actions that might trigger conventional conflict aims to bolster a sort of "firewall" between conventional warfare and gray zone conflict. NATO, up to now, has effectively obliged this Russian strategy by not brandishing threats of conventional escalation in response to Russian gray zone aggression, let alone undertaking conventional responses. As much as Russia seeks to avoid escalation to conventional warfare it could not win, it is also learning how averse NATO is to threaten such escalation. This aversion is ironic insofar as Cold War–era extended deterrence relied on NATO's threat of escalatory nuclear responses to conventional attacks.

These respective Russian and NATO postures enhance conventional stability, but at the cost of fueling instability at the gray zone level, reflecting a form of the stability–instability paradox familiar in nuclear strategies. This tailored application of the stability–instability paradox to the specific Russian context yields a tiered relationship of stability between the United States and Russia at each level of warfare, as depicted in Figure 1, and helps explain why the United States and Russia are the most unstable at the subconventional level, on which this research focuses.

²²⁷ Kofman, interview with author, October 23, 2019.

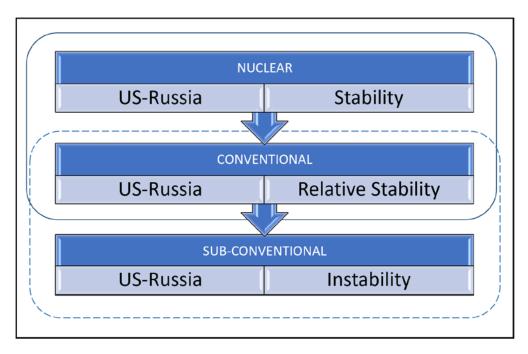


Figure 1. U.S.–Russian Stability Relationship²²⁸

Cumulative deterrence may be an option to address the issues created when adapting conventional deterrence to the sub-conventional level including the credibility and communication of the threat. Cumulative deterrence has not been a standard element of U.S. deterrence strategy in the past, and there is limited academic literature and strategic thought about its use in areas outside of cyber and terrorism. However, this new security environment characterized by great power competition at levels below open conflict requires a new way of looking at the deterrence landscape at the sub-conventional level. Subject matter experts for this research confirm that a zero-tolerance deterrence mindset will not work at the sub-conventional level and that the United States might have to choose what portions of the gray zone it wants to deter because it may be difficult to deter everything. 229

There is a precedent for applying a cumulative model and mindset of deterrence to limit and shape the sub-conventional level of conflict, and this suggests it may also be

²²⁸ Figure 1 was conceived of and created by the author.

²²⁹ See Appendix A.

applied to the current U.S. need to deter Russia's gray zone conflict. According to Thomas Rid, cumulative deterrence "consists of a series of acts of force to create—and maintain—general norms of behavior for many political actors over an extended period. Using force, consequently, does not represent a principal failure of deterrence but its maintenance through swift, certain, but measured responses." 230 Cumulative deterrence has been a key part of Israel's strategy for decades and was developed in the conventional and subconventional level focusing on limiting and shaping ongoing conflicts against both state and non-state actors at the conventional and sub-conventional level. 231 In addition, cumulative deterrence has recently been considered for use in deterring terrorism and cyberattacks, as it is designed for long-term sustained conflict, such as competition in the gray zone. 232

Doron Almong describes cumulative deterrence as functioning on two levels: the macro, which creates an image of overwhelming military superiority, and the micro, which relies on responses to adversarial actions.²³³ Almong also explains that cumulative deterrence has three key features.

First, its effectiveness is measured in terms of the number of victories accumulated over the duration of the conflict, which might be envisioned as "assets in a victory bank." Second, over time, these victories produce increasingly moderate behavior on the part of the adversary and a shift in its strategic, operational, and tactical goals until there is a near-absence of direct conflict. Third, this moderation may eventually result in political negotiations and perhaps even a peace agreement.²³⁴

Almong is describing cumulative deterrence as applied to the conventional level of warfare; however, in the context of Russia, the construct can be transposed to the sub-conventional level. At the sub-conventional level, U.S. responses over time to Russian gray

²³⁰ Thomas Rid, "Deterrence beyond the State: The Israeli Experience," *Contemporary Security Policy* 33, no. 1 (2012): 125, https://doi.org/10.1080/13523260.2012.659593.

²³¹ Uri Tor, "'Cumulative Deterrence' as a New Paradigm for Cyber Deterrence," *Journal of Strategic Studies* 40, no. 1–2 (2017): 92–117, https://doi.org/10.1080/01402390.2015.1115975.

²³² Rid, "Deterrence beyond the State"; Doron Almong, "Cumulative Deterrence and the War on Terrorism," *Parameters: Journal of the U.S. Army War College* (Winter 2004–2005): 4–18, https://www.hsdl.org/?view&did=453973.

²³³ Almong, "Cumulative Deterrence."

²³⁴ Almong. 9.

zone aggression could moderate Russian behavior, causing a shift in Russia's decision calculus and strategic goals, thereby diminishing the conflict.

The advantage of layering a strong conventional deterrence strategy with cumulative deterrence is that it allows the restoration of deterrence over time if conventional threats fail to deter at the sub-conventional level. Over time, cumulative deterrence responses to gray zone actions bolster the credibility of the United States and alter Russia's decision calculus at the sub-conventional level, therefore strengthening deterrence overall. Successful deterrence at the sub-conventional level requires a reorientation in how the U.S. views deterrence, moving from a zero-tolerance strategy to the long-term attrition of gray zone conflict. This renewed mindset allows for tailored punitive strategies that over time limit the bounds of the gray zone through the reiteration of unacceptable behavior through punishment. Regardless of the level at which a state wishes to conduct warfare, all deterrence strategies rely on three aspects that must work in concert: sufficient capabilities, solid credibility, and strong communication of a threat.²³⁵ As Rid explains, confrontations should be "seen as necessary evils that should be kept on as low a level as possible, but that could not be pushed down to zero."236 This argument assumes escalation control, which is to say that the United States can control escalation at the sub-conventional level on its own terms.

Many authors challenge the notion of escalation control, claiming that it is risky and nearly impossible. Scholars claim that avoiding escalation requires deterring the action and that a policy to deter one action could in fact risk escalation to another. Additionally, scholars claim, "Escalation control or management is an inherently imperfect business. It can be done well or poorly, but it is extremely rare for any set of policies to eliminate the risk of significant escalation altogether." These same scholars agree that the risk of inadvertent escalation can be reduced, but they are concerned that policy makers are

²³⁵ Matus Halas, "Proving a Negative: Why Deterrence Does Not Work in the Baltics," *European Security* 28, no. 4 (2019), https://doi.org/10.1080/09662839.2019.1637855.

²³⁶ Rid, "Deterrence beyond the State," 142.

²³⁷ Forrest E. Morgan et al., *Dangerous Thresholds: Managing Escalation in the 21st Century* (Santa Monica, CA: RAND Corporation, 2008), 44, https://www.rand.org/pubs/monographs/MG614.html.

incorrectly assuming it can be eliminated altogether.²³⁸ The concerns over escalation control are valid; however, it is possible to control escalation and use the threat of escalation to bolster deterrence. Mazarr explains that the gray zone puts the defender in the position to escalate, which is part of the challenge of deterrence.²³⁹ Both escalation control and deterrence fundamentally rely on communication and a thorough understanding of the adversary. Proper communication of the capability and the resolve to use the capability to deny or punish an action are just as crucial to escalation control as they are to deterrence. The same scholars who express concerns over escalation control also admit there is a way to control the risk: "Escalation depends heavily on an astute understanding of how the adversary will perceive and interpret events that have not yet occurred—not only in a general sense, but also under the specific and often difficult-to-predict conditions that will shape the opponent's perceptions and responses when a particular event occurs."²⁴⁰ The United States can both mitigate escalation and contribute to deterrence by adding an element of ambiguity to its deterrence threats that leave something to chance but also allow a response that limits or controls the escalatory response of the adversary.

When the United States responds with an instrument of state power in any DIME category, such as the expulsion of 60 Russian diplomats in response to the Russian nerve agent attack on a British citizen in 2018, it can strengthen cumulative deterrence credibility. Some of the literature on cumulative deterrence suggests that deterrence works by banking "wins" by responding to events with military power. However, when adapted to the gray zone, it seems critical that all elements of state power must be utilized, not just the military. The military is sometimes—not always—an appropriate response to an action in the gray zone, so threatening military retaliation for every tactic in the gray zone is not credible; however, a state must still have the ability to impose costs on an adversary for an action to make cumulative deterrence successful.

²³⁸ Morgan et al.

²³⁹ Mazarr, interview with author, December 17, 2019.

²⁴⁰ Morgan et al., *Dangerous Thresholds*, 45. Some of the ways in which escalatory actions intended to send clear signals could be perceived differently by the opponent.

3. Conventional and Cumulative Deterrence in the Gray Zone

After recent Russian gray zone aggression, from Ukraine to U.S. election meddling, the addition of troops and capabilities in NATO states and in the Baltics bolstered conventional deterrence efforts while the U.S. political and economic response to Russian actions in Ukraine contributed to cumulative deterrence efforts. The United States condemned Russia's actions in Ukraine and deepened cooperation with Ukraine, while Ukraine reinstated its strategic national goal of becoming a NATO member.²⁴¹ Economically, the United States invested heavily in the region, with the European Deterrence Initiative reaching \$6.5 billion in fiscal year 2019 and \$5.9 billion in 2020.²⁴² Additionally, Washington pledged to give Russia "no relief" from sanctions imposed until "Russia return [ed] control of the Crimean Peninsula to Ukraine." 243 The response from the United States and NATO goes toward cumulative deterrence by showing Russia that acts like this will not be tolerated in the future and that the United States and NATO will respond. The successful application of cumulative deterrence affects Russia's decision calculus and reduces the chance that it will repeat the same act in the future for fear of reprisal, which it knows will be the same as or worse than what it received for Crimea. In theory, over time, it becomes easier to modify Russia's actions in the gray zone because it has fewer options that benefit Russia without suffering the cost of bolstered conventional capabilities or the credible threat of punishment based on previous U.S. retaliation.

A recent case study illustrates how communication through diplomatic and military means might successfully control escalation and bolster cumulative deterrence. On February 7, 2018, the U.S.-led coalition established to counter the Islamic State of Iraq and the Levant (ISIL) in Syria came under attack by approximately 500 pro-Syrian government forces and Russian mercenaries, most likely part of the Wagner Group, which was loyal to

²⁴¹ "Relations with Ukraine," North Atlantic Treaty Organization, last modified November 4, 2019, https://www.nato.int/cps/en/natolive/topics_37750.htm.

²⁴² Halas, "Proving a Negative."

²⁴³ Mark Najarian, "US Issues 'Crimea Declaration' Reaffirming Rejection of Russia's Annexation," Radio Free Europe/Radio Liberty, July 26, 2018, https://www.rferl.org/a/u-s-issues-crimea-declaration-reaffirming-rejection-of-russia-s-annexation/29390681.html.

the Kremlin.²⁴⁴ Before the attack, the Russian and U.S. commanders communicated through deconfliction phone lines and stayed on opposite sides of the Euphrates River adjacent to Iraq, backing separate offensive forces against ISIL's oil-rich Deir al-Zour Province.²⁴⁵ As described by a report by the *New York Times*, after the attack, "the Russian high command in Syria assured us [the U.S. forces] it was not their people,' Defense Secretary Jim Mattis told senators in testimony last month. He said he directed Gen. Joseph F. Dunford Jr., the chairman of the Joint Chiefs of Staff, 'for the force, then, to be annihilated.' 'And it was.'"²⁴⁶

In total, anywhere from 200 to 300 pro-Syrian and Russian mercenaries were killed while zero Americans were injured or killed. 247 The tactic of Russia's maintaining plausible deniability for the attack provided the United States with an opportunity to use Syria as a communication channel to draw a deterrent red line even when Russia shrouded the action in ambiguity. Its claim of not being involved allowed the United States the same plausible deniability when it launched a military attack on the suspected Russian mercenaries. Essentially, the United States called Russia's bluff—that its thin veil of plausible deniability would prevent the United States from responding. Russia was then unable to take action or retaliate because, according to its own claims, the individuals killed in the strikes were not Russian, thus controlling the escalation on terms favorable to the United States. The United States was also able to create uncertainty in Russia's mind about future similar actions, further deterring and controlling the level of actions acceptable in the gray zone.

The tactic of using proxy or surrogate forces to carry out attacks and maintain plausible deniability as Russia did in Syria is a common tactic of gray zone conflict. The inability of the United States to deter such an attack yet its ability to follow with a swift

²⁴⁴ Thomas Gibbons-Neff, "How a 4-Hour Battle between Russian Mercenaries and U.S. Commandos Unfolded in Syria," *New York Times*, May 24, 2019, https://www.nytimes.com/2018/05/24/world/middleeast/american-commandos-russian-mercenaries-syria.html.

²⁴⁵ Gibbons-Neff.

²⁴⁶ Gibbons-Neff.

²⁴⁷ Gibbons-Neff.

and devastating response bolsters the credibility of U.S. conventional deterrence and puts a victory in the bank of cumulative deterrence. The United States failed to deter the initial strike because Russia had calculated that the U.S. capability or will to respond was insufficient. Russia was wrong. The act of attacking U.S. service members through proxy forces gave the United States enough interest and incentive to respond decisively with multiple conventional airstrikes, thus demonstrating the U.S. will and capability to deliver the exact conventional response it had threatened. Cumulative deterrence is bolstered when Russia changes its strategic risk calculus about conducting similar events in the future. The credibility of the deterrent threat for any action like the attack in Syria was underscored as reliable, allowing the United States to deter similar activities in the future and reducing the gray zone options available to Russia in the conflict.

The credibility of a deterrent threat relies on having suitable and sufficient capabilities to respond to the level of action the adversary is conducting. Additionally, the credibility of the deterrent threat relies on the defender's reputation and the asymmetry of stakes between the two actors. The message that the United States and NATO are sending aligns with NATO's Article 5, stating that severe consequences come with aggression against the United States or any NATO member. This is a credible threat, but it draws an apparent red line of attributable Russian aggression against a NATO member and leaves open anything below that line, which is where Russia is operating, and conventional deterrence alone is failing. The United States and NATO have begun to correct this conventional disparity, and they can continue to bolster deterrence at the lowest levels with the addition of capabilities, cumulative deterrence strategy, the bolstering of partner nations, and enhanced presence in the region.

After the actions in Crimea in 2014, President Obama, while in the Estonian capital of Tallinn, was reported as saying "not only that NATO will guarantee the independence and territorial integrity of every single Ally, but also that the Alliance must update its Rapid Response Force to deter potential threats."²⁴⁸ Update they did. Shortly thereafter, the NATO Response Force, which provides a collective defense and rapid military response to

²⁴⁸ Halas, "Proving a Negative," 436.

emerging crises, was enhanced to 40,000 troops. These troops include the Very High Readiness Joint Task Force (VJTF), which includes a multinational land brigade as well as air, maritime, and SOF components, and can be ready to deploy within two days. ²⁴⁹ Also included are two multinational brigades that make up the Initial Follow-on Forces Group, which can quickly deploy following the VJTF. In addition, the United States and NATO committed to joint exercises and a more significant presence in the Baltic region. ²⁵⁰ This addition of troops in conjunction with the increased presence of NATO in the Black Sea and increased maritime cooperation with Ukraine and Georgia shows a rejuvenated interest in the area, places the U.S. and NATO personnel on the front lines investing both at the outset of any hostilities, and brings conventional military assets closer to the Russian border—allowing for swifter response and more efficient support to U.S. allies and partners in the region, thus strengthening conventional deterrence of gray zone conflict.

To continue to bolster deterrence, the United States and NATO should work jointly to limit the number and effects of deterrence failures by learning from the previous shortcomings of conventional and strategic deterrence against Russian aggression. These failures provide insight into the risk calculus, appropriate U.S. response, deterrence weaknesses, and opportunities for the United States to bolster its deterrent posture at the conventional and sub-conventional level. Almong explains that the "implementation of cumulative deterrence at the sub-conventional level together with a better conventional strategy...might significantly strengthen the overall deterrence posture for the Alliance in the end."²⁵¹

By denying Russian objectives and influencing its decision calculus with cumulative retaliatory responses for aggressive actions in the gray zone, the United States can successfully lower Russian gray zone activities through deterrence. It is crucial to reiterate Rid's point that confrontations should be "seen as necessary evils that should be

²⁴⁹ Halas.

²⁵⁰ Halas.

²⁵¹ Almong, "Cumulative Deterrence." 444.

kept on as low a level as possible, but that could not be pushed down to zero."²⁵² Subconventional gray zone deterrence is not quixotic; it is possible with the right deterrence strategy. However, the U.S. view on deterrence success must shift from zero tolerance to the notion that deterrence failures provide an opportunity for response and the ability to deter similar threats more easily in the future.

²⁵² Rid, "Deterrence beyond the State," 142.

IV. DETERRING THE GRAY ZONE

The gray zone is the equivalent of playing three-dimensional chess, where you can see the board, but you can't count the number of other players, and you don't have any rules.

—Anthony Cordesman²⁵³

Both Russian and U.S. strategy documents alike recognize that the state of relations between the countries has shifted and is characterized by competition. Given this shift, it is critical to recognize the need for a changing character of deterrence at the subconventional level. This chapter provides an analysis supporting a proposed strategy for the United States to apply in the current security environment to effectively deter Russian gray zone conflict, backed by conventional and nuclear forces. The analysis is divided into two sections. The first section proposes establishing the conditions necessary for successful deterrence, including shifting away from the persistent zero-tolerance deterrent mindset and re-establishing communication and diplomacy with Russia. The second section explores specific components of deterrence strategy that can be used to counter Russia's gray zone conflict, including deterrence by denial, deterrence by punishment, and restoring deterrence through escalation to conventional forces. The strategy is based on interviews with subject matter experts and supported by current literature.

The individual components of the strategy include deterrence by denial through strengthening alliances, bolstering alliance capacity, collaborating between private and government entities, developing state resilience, and increasing U.S. information operations. The deterrence-by-punishment portion of the strategy includes all aspects of DIME in response to unacceptable gray zone activities, such as physical infiltration of a sovereign nation, interference in the democratic process, the use of proxy forces that endangers U.S. interests or service members, and any action inconsistent with the international norms of responsible state behavior, such as the use of chemical weapons in an assassination attempt on European soil. The components of the strategy are best used in

²⁵³ Cordesman, interview with author, November 7, 2019.

conjunction with one another; however, improvement in any of the areas goes toward bolstering sub-conventional deterrence of Russian gray zone conflict.

Although this chapter focuses specifically on a deterrence strategy applied to Russia's gray zone activity, any deterrent strategy must nest within a broader strategic national security effort toward Russia. As discussed in the preceding chapter, deterrence relationships at different levels of potential conflict can interact with each other in complex ways. In some instances, the best gray zone deterrent strategy could be detrimental to the overarching policy and national security objectives of the United States. In other instances, maintaining strategic stability may make gray zone deterrence harder. Michael Mazarr states, "There is a role for deterrence to play in a larger strategy, but it has to be one of the number of pieces that must be put into play. There is not an independent deterrent policy standing alone that can achieve that goal." To this end, any deterrent strategy presented in this research should be analyzed in context with the most current geo-political environment and national security objectives before implementation.

A. NECESSARY CONDITIONS FOR A DETERRENT STRATEGY

A necessary condition for deterrent success that is specific to the sub-conventional level and the current security environment is a shift in the deterrence mindset away from zero tolerance of deterrence failure toward a cumulative deterrence posture that focuses on maintaining overarching credibility via tailored responses to targeted gray zone activities when deterrence and denial fail. Additionally, for any deterrent strategy to be applied, the foundational conditions of deterrence must be in place, including communication and diplomacy to provide assurances and alternate options to an adversary. Leon Panetta asserts, "Communication with adversaries is imperative to have. It serves to forward human relationships that are critical in the ability to create dialogue and keep open lines of communication." Since the end of the Cold War, these conditions have deteriorated between the United States and Russia, and restoring them is essential.

²⁵⁴ Mazarr, interview with author, December 17, 2019.

²⁵⁵ Leon Panetta (former secretary of defense, White House chief of staff, and director of the Central Intelligence Agency), interview with author, December 16, 2019.

1. Shifting the Deterrent Mindset

When applying deterrence to the sub-conventional level, a zero-tolerance approach is not appropriate; it is crucial that intermittent failures of deterrence by denial be accepted to plan for the punitive strategy that follows. Simply relying on a classic deterrent mindset of zero tolerance for failure limits the U.S. ability to respond when deterrence does fail at the sub-conventional level. Panetta explains, "The worst thing that the U.S. could do in the face of the gray zone is to pretend that because we developed a Cold War approach to dealing with the former Soviet Union, somehow that is enough to deal with Russia in the 21st century." 256

Punitive measures levied against actions in the gray zone restore deterrence, imposing a cost for an action that the United States deems unacceptable and communicating the cost to Russia for any similar actions in the future. When the subject matter experts were asked what the worst strategy the United States could adopt to deter Russian gray zone conflict was, every interviewee responded the same way: "Do nothing."²⁵⁷ Inaction is what a sub-conventional deterrent strategy based on deterrence by denial alone would appear to be. Failing to counter Russian gray zone activity when denial fails effectively generates the opposite reputational impact of cumulative deterrence, and so is detrimental to deterrence and risks escalation. Belinda Bragg explains,

Inaction in the face of low-level gray actions can, over time, create a "new reality" that threatens U.S. interests and security. At that point, reversion to the status quo ante will likely require much greater, and more costly actions, and may not be possible without the use of military force. Part of the reason Russia is choosing to operate in the gray zone is its perception that the U.S. will not respond to lower level actions for fear of triggering escalation. U.S. failure to develop early, effective response options reinforces this perception. An enduring, proactive presence and consistent messaging

²⁵⁶ Panetta, interview with author.

²⁵⁷ See Appendix A.

across all USG [U.S. government] agencies is a significantly superior approach to taking select actions in response to Russian aggression. ²⁵⁸

This is not to say that the U.S. should punish every gray zone action that Russia pursues; however, by determining what actions it cannot tolerate and being prepared in those instances with a reasonable and proportionate punitive response that includes all aspects of its state power, Washington can deter certain gray zone actions. Panetta explains, "To find a basis on which to deal with Russia, the U.S. must do it from a position of strength, which requires making very clear to Russia where the lines are. The U.S. must clearly communicate that it will not tolerate the violation of state sovereignty, nor will it tolerate Russia interfering in democratic institutions." Mazarr agrees and believes the United States can improve its strategy by recognizing what gray zone actions it will not tolerate and improving communications with Russia regarding the boundaries of those actions. 260

2. Communication

Communication between the United States and Russia is at an all-time low since the end of the Cold War, yet it is a critical element in the framework of deterrence, especially at the sub-conventional level, where the cost of action is low and attribution is difficult. An effective deterrence strategy relies on Washington's re-establishing consistent communication avenues with Moscow. These avenues must include both strategic and sustained communication, each of which has formal and informal components. Effective communication allows the United States to employ a dual-pronged deterrent strategy utilizing deterrence by denial and deterrence by punishment through focusing its punitive efforts on key gray zone actions while reserving resources for denial efforts, such as resiliency and information operations. Douglas Lute explains, "It's not enough for the U.S.

²⁵⁸ Belinda Bragg, "Defining the Competitive Zone to Aid Identification of Critical Capabilities," in *Russian Strategic Intentions: A Strategic Multilayer Assessment (SMA) White Paper*, ed. Nicole Peterson (Washington, DC: Department of Defense, May 2019), 131–132, https://www.politico.com/f/?id= 0000016b-a5a1-d241-adff-fdf908e00001.

²⁵⁹ Panetta, interview with author, December 16, 2019.

²⁶⁰ Mazarr, interview with author, December 17, 2019.

to have these threats and believe them; in fact, that has no deterrent effect. The critical thing is to communicate them in a clear, unambiguous, and consistent way with Russia."²⁶¹ U.S. threats will not be credible if they promise an escalation that Russia is not likely to believe.²⁶² Identifying gray zone activities that the United States will not tolerate and communicating these limits to Russia bolster the credibility of the punitive threat assigned to those actions.

Michael Kofman explains, "In this area of great power competition, the U.S. needs a robust mechanism for signaling its deterrent threats and assurances to Russia." 263 Kofman goes on to explain that it is also imperative for the United States to communicate as a unitary actor with a disciplined public policy establishment that considers what and to whom it should be communicated. 264 In an era of rapid technological growth that allows anyone, including government figures, to publish instantaneously on multiple communication formats, such as social media, there is a risk of undisciplined communication with adversaries if the individuals in the establishment are not disciplined. Additionally, Kofman explains that the United States "must develop channels of signaling across multiple levels with Russia to ensure that the deterrent strategy, threat, assurance, and diplomatic alternatives are communicated and received correctly." 265 Re-establishing a persistent and institutionalized form of communication with Russia will enable the states to build a modicum of trust that the diplomatic alternative routes being provided are legitimate and will be honored.

Not only does the United States need to re-establish communication with Russia, but it also needs to improve communication internally. Panetta explains, "A crucial aspect to deterrence is political leadership that recognizes the threat that Russia represents, speaks to that threat, encourages discourse, and defines the areas of conflict in order to mobilize

²⁶¹ Lute, interview with author, November 26, 2019.

²⁶² Mazarr, interview with author, December 17, 2019.

²⁶³ Kofman, interview with author, October 23, 2019.

²⁶⁴ Kofman, interview with author.

²⁶⁵ Kofman, interview with author.

the efforts needed to deter the gray zone activity."²⁶⁶ Internal communication among policy makers and political leadership is essential to a coherent message to U.S. adversaries. Communication with the American public is crucial to counter the disinformation that Russia is propagating, and communication with U.S. allies is required to form a united front working toward diplomatic solutions to Russia's gray zone actions.

a. Options for Strategic Communication

Since the end of the Cold War, the United States, NATO, and Russia have had established lines of strategic communication. As detailed in Chapter II, today, only a limited few remain, and of those, most are not being used to signal to Russia a coherent and consistent message. Strategic communication, such as published policy, speeches, public statements, and social media, can indicate U.S. red lines and security assurance in the gray zone. Declaratory policy, such as the U.S. *National Security Strategy*, *National Defense Strategy*, and the *Nuclear Posture Review*, has an important role; however, these documents serve only as a snapshot into U.S. decision-making and policy and do not get to the heart of altering Russia's decision calculus at the sub-conventional level.

The gray zone, by design, operates below the level of warfare that many of these documents address. To improve the effectiveness of these documents in addressing gray zone conflict, Guillaume Lasconjarias of the NATO Defense College suggests "review [ing], moderniz [ing] and updat [ing] planning documents, in order to take stock of new threats and start exercising them accordingly with a view to showing our resilience." The United States could add a section to its policy documents dedicated to subconventional conflict in which it signals its resolve in using punitive measures for any adversary willing to cross those lines. The statements could convey clear red lines or maintain a level of vagueness and ambiguity to leave something to chance in the

²⁶⁶ Panetta, interview with author, December 16, 2019.

²⁶⁷ Guillaume Lasconjarias, "Deterrence through Resilience: NATO, the Nations and the Challenges of Being Prepared," Eisenhower Paper 7 (Rome: NATO Defense College, May 2017), 7, http://www.ndc.nato.int/news/news.php?icode=1060.

adversary's decision calculus, depending on whether specificity or ambiguity would be a more effective deterrence posture given the circumstances.

A less formal avenue of declaratory policy that can be used to communicate comprises speeches and published articles by political leadership. NATO, for example, has used this communication avenue to establish a deterrent against cyberattacks by highlighting efforts to increase alliance cyber resilience and threatening the punitive enactment of Article 5. In May 2018, NATO Secretary General Jens Stoltenberg gave a speech at the Cyber Defence Pledge Conference in which he stated, "NATO leaders agreed that a cyber-attack could trigger Article 5 of our founding treaty." Stoltenberg went on to proclaim,

Being strong in cyberspace is as important for our deterrence as our conventional forces have always been. By making cyber a domain, encouraging Allies to develop their own cyber capabilities, and agreeing that a cyber-attack can trigger an Article 5 response, we can make the potential cost of action by an aggressor high. And, in that way, strengthen our deterrence, defence and resilience in cyberspace.²⁶⁹

The use of public speeches allows the United States and its allies to communicate relevant policies, deterrence threats, and denial initiatives without the formal process of publishing an official policy document, which takes an abundance of time and resources and generates fewer flexible postures. Speeches and published articles also allow for collaboration between the United States and its partners, such as NATO, to present a stronger deterrent to Russia with a united collective message. This, however, requires coordination and concurrence, which is not always seen in U.S. policy communication with Russia.

Another communication avenue comprises public statements by political officials in response to punctuating and troubling events. In October 2019, Russia carried out a cyberattack on Georgia in which it disrupted operations of websites and major television

²⁶⁸ "Speech by NATO Secretary General Jens Stoltenberg at the Cyber Defence Pledge Conference," North Atlantic Treaty Organization, May 15, 2018, https://www.nato.int/cps/en/natohq/opinions_154462. htm.

²⁶⁹ North Atlantic Treaty Organization.

stations. In response, the United States, along with its allies and partners, released a press statement condemning Russia's actions. Secretary of State Mike Pompeo attributed the attack to Russia, condemned its behavior as being inconsistent with a "responsible actor," and called on Russia to cease the behavior. Moreover Pompeo pledged "support to Georgia and its people in enhancing their cybersecurity and countering malicious cyber actors . . . [and] offered additional capacity building and technical assistance to help strengthen Georgia's public institutions and improve its ability to protect itself from these kinds of activities." The statement served to communicate to Russia the reinforcement of red lines, such as violating U.S. or NATO state sovereignty, but it also served to publicly attribute the attack to Russia. An issue for deterrence in the gray zone is that Russia aims to hide behind the ambiguity it creates to avoid reprisal for its actions. During a recent workshop at Lawrence Livermore National Laboratory, experts reiterated the point made by recent literature: since the Russian NotPetya cyberattack, the United States has gotten more comfortable attributing cyber actions, which in turn makes it easier to deter or punish such actions in the gray zone. 271

A less formal, although increasingly popular, form of public statement is through social media. President Trump uses social media to make statements on U.S. policy, which if tied into an overarching deterrent policy or strategy toward Russia, could be used to forward a coherent message to Russia. The expedient nature of posting on social media can fill a void to address urgent and emerging issues that the United States should address but that cannot wait for the publication cycle of an official policy or the process of producing and scheduling an official statement.

²⁷⁰ Mike Pompeo, "The United States Condemns Russian Cyber Attack against the Country of Georgia," Department of State, February 20, 2020, https://www.state.gov/the-united-states-condemns-russian-cyber-attack-against-the-country-of-georgia/.

²⁷¹ Alina Polyakova and Filippos Letsas, "On the Record: The U.S. Administration's Actions on Russia," Brookings Institution, June 3, 2019, https://www.brookings.edu/blog/order-from-chaos/2018/09/25/on-the-record-the-u-s-administrations-actions-on-russia/; Pompeo, "United States Condemns Russian Cyber Attack"; U.S. Congress, Senate Select Committee on Intelligence, *Report on Russian Active Measures Campaigns and Interference in the 2016 U.S. Election*, vol. 1, *Russian Efforts against Election Infrastructure with Additional Views* (Washington, DC: U.S. Congress, 2019), https://www.google.com/search?client=firefox-b-1-d&q=116th+congress.

b. Options for Sustained Communication

Effective deterrence requires sustainable communication avenues beyond declaratory policy and statements, which give Washington and Moscow an avenue to normalize communication through repetitive interactions on a predictable schedule. Before Russia's annexation of Crimea in 2014, diplomatic, military, and crisis communication was common practice; now, it is "no business as usual" between the United States and Russia, which is detrimental to deterrence.

One option for re-establishing diplomatic communication is to utilize the existing framework for communication. Lute suggests reinvigorating the use of the U.S. ambassador to Russia, utilizing the NATO–Russia Council (NRC), encouraging a discussion between Russia and NATO about reinstating a Russian ambassador to NATO, and re-establishing the Russian liaison at the Supreme Headquarters Allied Powers Europe (SHAPE). As detailed in Chapter II these positions were suspended and their personnel restricted after the invasion of Crimea as a message that the international norm of respecting a state sovereignty must be upheld. It is imperative to both deterrence of future similar events and the integrity of state sovereignty in the international system that this norm be upheld; however, without communication avenues with adversaries, these issues cannot be addressed. The re-establishment of ambassador-level discourse does not endanger the norm; to the contrary, it allows the United States and NATO to communicate its importance.

The suggestions detailed by Douglas Lute are very feasible and could be implemented quickly as an immediate bolstering effect to U.S. deterrence. The implementation or re-establishment of ambassadors and liaisons is simply personnel and access management. The positions remain. Russia currently has two ambassadors located near NATO headquarters in Brussels, one to the European Union and one to Belgium. Lute suggests that one of the ambassadors could be dual-hatted as the NATO ambassador. This would aid not only in communication with the United States and NATO but also in the solidarity of the communication between the United States and Europe through the EU.

²⁷² Lute, interview with author, November 26, 2019.

In NATO, the NRC still meets on a somewhat regular basis, four out of five permanent members of the United Nations Security Council (P5) are in attendance, and the allied member nations take the forum seriously. The meetings are not without tension due to the tentative nature of the relationship between Russia and the alliance; however, it serves as a forum to bring together nuclear and non-nuclear allies to engage in a broader dialogue with Russia that they could not have on their own. The approach of strength in numbers can be leveraged in the NRC to address issues with Russian gray zone operations on a united front with a coherent allied message, which will aid in denying Russia's end goal of fracturing the U.S.–NATO alliance. The NRC also allows the United States to make steps in communication with Russia that it could not do on its own because of the limited political communication avenues remaining. In using the established NRC forum, Washington and Moscow can bypass the issues related to convening a bi-lateral summit, such as the public perception of diplomacy with an adversary that has been demonized among the American public, the will of either state leadership to meet, or simply the logistics of coordinating a physical meeting.

Despite the plummeting political relations between the United States and Russia, military communication has remained, even if in a limited fashion. Military contact has served as a mainstay of communication between the states since 2014 and the expulsion of many Russian diplomats. At the top levels of military leadership, the chairman of the Joint Chiefs of Staff, U.S. Army General Mark Milley, and the Russian chief of the General Staff, General Valery Gerasimov, continue a limited but regular dialogue. Ulrich Kühn argues, "NATO should aim to re-establish . . . communications channels with the Russian General Staff at the working level." The top-level interaction is a positive foothold in U.S.–Russian communication; however, more frequent communication is needed. Recently, the interaction between the top levels has increased, including a physical meeting in Switzerland "aimed at increasing communication between their nations to reduce risks

²⁷³ Ulrich Kühn, *Preventing Escalation in the Baltics* (Washington, DC: Carnegie Endowment for International Peace, 2018), 63, https://carnegieendowment.org/2018/03/28/nato-s-options-pub-75883.

in conflict areas."²⁷⁴ Efforts are in place to improve military communication and could be enhanced through the replacement of the Russian liaison at SHAPE and by acting on Kühn's suggestion of re-establishing working-level military communication. These improvements to military communication could set the framework of positive relations between the states to usher in future consistent diplomatic communication, which is crucial for deterrence.

In addition to diplomatic and military communication, communication during a crisis is critical in the maintenance of a deterrent posture. Just after the Cuban Missile Crisis, the United States and the Soviet Union signed a 1963 memorandum of understanding that established a direct link between the two states. The "hotline," as it was called, was "a quick communication link between heads of states . . . designed to reduce the danger of an accident, miscalculation or a surprise attack."²⁷⁵ The hotline was used multiple times throughout history and has since been transitioned to the Nuclear Risk Reduction Center, where its role has been expanded to include providing an communication between the United States and Russia for "the exchange of notifications under treaties, goodwill notifications, and for emergency communication during a major fire in the U.S. Embassy in Moscow."²⁷⁶ Although the hotline was established to prevent crisis and escalation to nuclear war, it has proven an effective means of communication during both crisis and stability between Washington and Moscow. Robert Gates, former CIA director and defense secretary, stated that the hotline is a critical tool "as long as these two sides have submarines roaming the oceans and missiles pointed at each other."²⁷⁷

In today's context, where most of the conflict between great powers is conducted below the level of conflict for which the hotline was created, the hotline's utility can be expanded as a tool to re-establish communication and broaden communication to include

²⁷⁴ Jim Garamone, "Top U.S., Russian Military Leaders Meet to Improve Mutual Communication," Department of Defense, December 18, 2019, https://www.defense.gov/Explore/News/Article/Article/ 2043133/top-us-russian-military-leaders-meet-to-improve-mutual-communication/.

^{275 &}quot;Hotline Agreements," Arms Control Association, April 2018, https://www.armscontrol.org/factsheets/Hotlines.

²⁷⁶ Arms Control Association.

²⁷⁷ Arms Control Association.

immediate gray zone issues. Considering the increased risk of miscalculation based on the current lack of communication and the ability for gray zone operations to escalate, a crisis hotline is a rational and effective communication avenue that is already established and can be immediately utilized to kick-start communication. The communication can even start within the parameters of the existing framework of the NRC to encourage discourse and submit proposals or grievances over the extension of New START.

3. Diplomacy

Through diplomacy, it is possible for the United States and Russia to build lasting cooperation through formal agreements, mutual interests, and established codes of conduct. This section explores both formal and informal diplomacy followed by a discussion of U.S. and Russian common interests detailing specific categories in which diplomacy could be renewed. However, diplomacy must be a first-line option supported by credible threats of denial and punishment. Anthony Cordesman explains, "The one thing that you cannot do is use diplomacy as a substitute for countermeasures." ²⁷⁸ It is critical to recognize that every effort spent toward diplomacy can help stabilize U.S.–Russian relations at the nuclear and conventional level. Improved stability at these levels can alleviate tension and reveal where instability is still present at the sub-conventional level.

Washington must operate from a place of strength to affect Putin's cost–benefit analysis through deterrence by denial, supported by punishment, while also giving him a diplomatic alternative. Brad Roberts explains that during his time with the Obama administration, it was clear that "President Putin concluded that there was a fundamental conflict of interest with the United States, that it was a zero-sum game. The U.S. was pursuing interests against Russia that were simply unacceptable to President Putin, and as such, he reconceived a relationship of enduring conflict." As described in earlier chapters, the United States attempted to demonstrate that Putin had taken too dark a view

²⁷⁸ Cordesman, interview with author, November 7, 2019.

²⁷⁹ Dr. Brad Roberts (director of the Center for Global Security Research at Lawrence Livermore National Laboratory and former deputy assistant secretary of defense for nuclear and missile defense policy), interview with author, October 18, 2019.

of American interests and through diplomatic opportunities sought to pursue mutual interests and pragmatic cooperation in various areas; however, the efforts failed. Roberts explains that this conflictual relationship does not have to be inevitable: "It is a matter of political calculus emanating from a particular person at a particular time." ²⁸⁰ This would suggest that to restore diplomatic cooperation with Russia, Putin's decision calculus must be influenced to convince him that it is in his best interest.

Cordesman illustrates that "the U.S. tends to deal with Russia in terms of the sticks and often does not have a well-defined set of carrots." Cordesman goes on to explain that a necessary addition is "offering a well-defined alternative in terms of cooperation where the U.S. and Russia both benefit." Operating a deterrent strategy solely on punishment threats is dangerous because, although it is imperative to signal to Russia that there are penalties for misbehavior, the United States must also signal assurance for compliance. With established communication, diplomacy will facilitate not only that acceptable alternative but also aspire to build formal and informal agreements that bound sub-conventional conflict, decrease the risk or escalation, and provide insight toward an adversary's intent.

a. Formal Diplomacy

Formal diplomacy between the United States and the Soviet Union, and now Russia, has been a stabilizing force in the bilateral relationship since the Cold War and, furthermore, has contributed to the safety and security of the international security environment. Treaties and confidence-building measures that modify behavior set the standard for how states conduct business, and develop trust. The Open Skies Treaty, the Comprehensive Test Ban Treaty, and arms control have been staples of the U.S.–Russian relationship. While some diplomatic measures are still in place, or followed even if they have not been ratified, the erosion of formal diplomacy in recent years has reduced the trust

²⁸⁰ Roberts, interview with author.

²⁸¹ Cordesman, interview with author, November 7, 2019.

²⁸² Cordesman, interview with author.

and communication between the United States and Russia, causing a destabilizing effect on deterrence, specifically in the sub-conventional level.

To deter Russian gray zone aggression, many subject matter experts suggest reinvigorating efforts to extend New START. The treaty between the United States and Russia, which entered into force in February 2011, sets "measures for the further reduction and limitation of strategic offensive arms." The treaty also provides confidence-building measures that encourage transparency such as on-site inspections, data exchanges, notifications, and the exchange of predicted yearly numbers of ballistic missiles (both sea and land based). Panetta suggests, "The U.S. should not only reignite interest in extending the New START treaty, but also in developing an improved agreement for the future, one that possibly includes the cyber domain and future weapons." Since the dissolution of the INF in 2019, the bilateral New START is the last remaining formal arms control measure between the United States and Russia and is key in keeping formal diplomatic relations afloat.

Even if New START is not extended, discussions over the treaty's contents could be used to spur discussion on a new arms control treaty or, at the very least, a broader discussion and effort toward multilateral arms control. Kühn explains that discussions about arms control are "particularly important since the strategic nuclear dialogue between Washington and Moscow effectively petered out after the New START entered into force in 2011." Kühn suggests, "Reconvening NATO–Russian talks about military strategy and nuclear doctrine, which had been ongoing prior to Russia's annexation of Crimea, could help dispel misperceptions and thus avoid inadvertent escalation." As the time-tested formula for risk reduction is deterrence plus diplomacy, Kühn's suggestion to

²⁸³ Department of State, "New START Treaty."

²⁸⁴ Department of State.

²⁸⁵ Panetta, interview with author, December 16, 2019.

²⁸⁶ Kühn, Preventing Escalation in the Baltics, 64.

²⁸⁷ Kühn, 63.

reconvene NATO–Russian communication, combined with U.S.–Russian efforts toward New START or a similar treaty, would likely bolster deterrence of the gray zone.

These efforts to reinstate formal diplomacy would emphasize the U.S. resolve toward diplomacy and simultaneously signal to Russia that the use or threat of tactical nuclear weapons is not in its interest as a state.²⁸⁸ By addressing the unacceptable use of tactical nuclear weapons in the context of arms control, Washington has a forum to address the issue while it reaffirms the nuclear taboo and communicates to Moscow that any use of a nuclear weapon will be met with grave U.S. and international consequences. This reaffirmation of non-use drives the U.S.–Russian conflict back to the sub-conventional level, allowing the United States to focus resources and diplomacy efforts on the gray zone.

In a situation where the United States and Russia do not extend New START, formal diplomacy could be achieved through a unilateral approach. To show commitment and a willingness for diplomacy, the United States could make a public commitment to data exchanges and inspections in line with what would have occurred if New START had been extended. The United States could also make a public commitment to maintaining the limited number of weapons designated by New START. These commitments would foster an environment ripe for continued formal negotiations of a future arms agreement between the United States and Russia as well as open the path to informal diplomacy between the states.

Overall, formal diplomacy should parallel the efforts suggested for communication including the use of the existing diplomatic framework such as the NATO–Russia Council, the Nuclear Risk Reduction Center, and ambassador and liaison positions to NATO, the EU, and SHAPE. These established avenues are the fastest and most acceptable way to reinvigorate desperately needed diplomacy between the United States and Russia. In the beginning of the rebuilding, the topic of diplomacy is less important than the act of reinvigorating it. The United States and even NATO need to take a hard look at where they can afford to relax the approach to ostracize Russia from diplomatic lanes while

²⁸⁸ Kühn.

maintaining their position of strength and staunch protest of egregious Russian behavior that is inconsistent with responsible state behavior.

b. Informal Diplomacy

Without the robust structure of formal treaties between the United States and Russia, many experts believe that a normative approach to confidence-building measures and diplomacy could fill the void, reassert a modicum of trust between the states, and help bolster deterrence. This section first discusses the nature of informal diplomacy and follows with specific examples of how it can be applied. A norms-based approach lends better to multilateralism and requires less time and fewer resources to gain support and traction in a wide variety of states and communities. In the current security environment filled with tension and distrust, formal diplomacy is limited at best. Starting with a norms-based approach that establishes touchpoints and "easy wins" for the United States, Russia, and the international community could pave the way for more formal diplomacy in the future.

Informal diplomacy is not new; it is a time-tested approach that has gone hand-in-hand with formal diplomacy for centuries. One of the most influential informal confidence-building measures is the Vienna Document, which was adopted in 1990.²⁸⁹ The document requires that participating states of the OSCE, of which the United States and Russia are part, to exchange information on a host of different topics. Topics include such items as the exchange of military information, defense planning, prior notification of military activities, and agreement to inspections and visits. Recently, with its gray zone activities, Russia has begun to erode the sanctity of this agreement. Informal diplomacy has also taken the form of codes of conduct. Twenty-five years ago, the Stimson Center issued a code of conduct for space, and the EU drafted a similar code of conduct during the Obama administration. Although the EU code of conduct was not well received, it did stimulate dialogue over the issue; such a normative approach today would be an improvement to the current situation.

²⁸⁹ Vienna Document of the Negotiations on Confidence- and Security-Building Measures Convened in Accordance with the Relevant Provisions of the Concluding Document of the Vienna Meeting of the Conference on Security and Co-operation in Europe, November 17, 1990, https://www.osce.org/fsc/41245?download=true.

History has also shown that when patterns of behavior are established before a crisis, the behavior has held during the crisis. A good example is the 1988 agreement on ballistic missile launches between the Washington and Moscow. The confidence-building measures in place before then had covered some but not all launches. In 1988, both states signed an agreement to provide advance notification for all ballistic missile launches, including from submarines. Additionally, even when the established behaviors do not hold, they provide a signal of adversarial intent that can serve as an early warning or proof of malicious behavior. For example, before the invasion of Crimea, Russia ceased to comply with the Vienna Document by failing to provide notification of troop maneuvers. Such an indication of non-compliance with normative behavior gives the Washington time to communicate red lines, a deterrent threat, and negative security assurances for compliance, therefore strengthening the chances of deterrence success.

Examples of how informal diplomacy can be applied in today's environment include standards of conduct regarding sovereignty, mutually moderating gray zone activity, and reinvigorated informal agreements. Since the Helsinki Final Act of 1945, the international norm of respecting a state's sovereignty has been upheld. Russia openly challenged this norm through its illegal annexation of Crimea, cyberattack on Georgia, and information campaigns to spread disinformation and sow unrest to disrupts borders. One of the high-end issues of the gray zone that the United States would want to deter in the future is the violation of state sovereignty. The re-establishment of the norm for respecting state sovereignty could aid in deterring gray zone actions such as proxy forces and "little green men."

The issue, as Kofman explains it, is that Russia and the United States have fundamental differences in their normative outlooks on international politics and sovereignty.²⁹¹ Kofman elaborates that Russia believes that state sovereignty is hierarchal, that countries have a spectrum of sovereignty, and that the only countries with true

²⁹⁰ Agreement between the United States of America and the Union of Soviet Socialist Republics on Notifications of Launches of Intercontinental Ballistic Missiles and Submarine-Launched Ballistic Missiles, U.S.-U.S.S.R., May 31, 1988, T.I.A.S., https://2009-2017.state.gov/t/avc/trty/187150.htm.

²⁹¹ Kofman, interview with author, October 23, 2019.

sovereignty are great powers. All other countries below great powers, Russia believes, have less sovereignty—small or weak states have the least sovereignty—so smaller or weaker states must abide by what the great power states tell them to do.²⁹² Russia treats states such as Georgia and Ukraine as weaker states having less sovereignty and makes efforts to regulate these states' behavior, such as forbidding them from joining NATO. If Washington wants to deter Moscow from violating other states' sovereignty in the future, it is critical that it recognizes this fundamental difference in viewpoint and addresses it accordingly. To that end, David Holloway highlights a vital point to the success of diplomacy between the United States and Russia: "The U.S. cannot pretend that Russia is not a great power. . . . For cultural and historical reasons, Russia should have some say in what goes on in its region." ²⁹³ To ignore Russia's status as a great power, and to deny it a modicum of influence in the region, is in danger of being provocative. ²⁹⁴ It is essential that the United States balances preserving the norm of state sovereignty with recognizing Russia as a great power. To do this, the United States must be willing to include Russia in diplomatic affairs that affect its geographical region. This is not to say that the Washington should allow Moscow to dictate the fate of every state and issue in the region; however, it is to highlight that Russia should be a player in the decision-making process.

To strike this delicate balance, the United States must act from a position of strength derived from the willingness to punish Russian actions that violate state sovereignty combined with a diplomatic solution that Russia sees as advantageous. The United States has recently made progress on the ability and willingness to respond to Russian aggression in the gray zone through punishment by publicly attributing cyber actions to Russia and taking punitive action in response, as previously mentioned. Continued deterrence by punishment accompanied by diplomacy is the best way for the United States to deter future Russian sovereignty violations. Kofman suggests, "If the U.S. and Russia could set standards

²⁹² Kofman, interview with author.

²⁹³ Dr. David Holloway (senior fellow emeritus at Stanford University's Freeman Spogli Institute of International Studies), interview with author, November 14, 2019.

²⁹⁴ Holloway, interview with author.

of conduct regarding sovereignty, it would go a long way toward granting Russia the legitimacy as a great power in the international system that it so desires."²⁹⁵

Specifically related to the deterrence of the gray zone, Mazarr believes that there is an opportunity to establish an implicit agreement between the United States and Russia to moderate gray zone activities.²⁹⁶ As shown in earlier chapters, Russia is concerned about the United States' influencing Russian populations and inciting color revolutions. This threat perception gives Washington a bargaining tool toward an agreement with Moscow to moderate its behavior. The United States could offer to stop promoting democratic activities in Russia, such as support for pro-democratic, non-profit agencies in Russia, in exchange for Russia's agreeing to cease all information campaigns and interference in democratic processes in the United States and allied nations. This agreement would require verification and monitoring by the United States, which could be achieved through partnership with private organizations capable of identifying disinformation and cyber meddling, as well as an in increase in U.S. government intelligence resources. The agreement is feasible because it gives Russia something that it values in exchange for something that it can agree to stop doing. The code of conduct agreement would not deter all gray zone activities, but it would aid in denying one of Russia's ends by limiting its ability to degrade U.S. democratic institutions. The United States could further apply deterrence by denial if Russia violates the agreement because a violation would give further credit to the U.S. resolve to use its deterrence-by-punishment threats and could affect Russia's decision calculus toward the action.

There is also an opportunity to reinvigorate already established informal agreements such as the Vienna Document. Kühn states, "Modernizing the OSCE's Vienna Document . . . might be achievable even in the current environment." ²⁹⁷ Lute comments that the Vienna Document "sets up rules of the road for security arrangements in Europe,

²⁹⁵ Kofman, interview with author.

²⁹⁶ Mazarr, interview with author, December 17, 2019.

²⁹⁷ Kühn, Preventing Escalation in the Baltics, 63.

and established elements of stability at the conventional level."²⁹⁸ In an environment of great power competition where Russia feels that the security environment is not structured fairly, it has violated this agreement repeatedly. Lute suggests opening diplomatic talks with Russia and simply asking whether it has suggestions to make the agreement better. What does it suggest?²⁹⁹ Although the security environment is tense—recall from Chapter II that one of Russia's strategic goals is to be seen as a great power—the support and reinvigoration of the Vienna Document, with Russia as a supporter, would go a long way toward that goal. The United States could easily allow Russia to take the lead on the effort and show its support for the initiative, giving legitimacy to Russian actions as a great power while simultaneously confirming that great powers adhere to a code of conduct, such as the Vienna Document, which restricts higher-end gray zone activity such as proxy forces, little green men, and ambiguous nefarious behavior.

c. Common Interests

Significant cooperation requires that Washington and Moscow have common interests that are advantageous in some way to both states. In the current adversarial relationship between the states, it might seem those interests are limited; however, there are many more obvious interests at first glance. The 2019 *Strategic Multilayer Assessment* of Russian strategic intentions found that the United States and Russia do share common interests whereby deeper diplomacy could be rebuilt. These common interests include the Middle East; the fight against terrorism and jihadist groups, such as Al-Qaeda and ISIL; and nuclear counterproliferation. 300

The assessment points out that "unlike the Soviet Union which often sought to undermine Middle Eastern governments allied to the US, Putin's Russia basically supports them all." ³⁰¹ The assessment continues, saying that there is space for cooperation between

²⁹⁸ Lute, interview with author, November 26, 2019.

²⁹⁹ Lute, interview with author.

³⁰⁰ Mark N. Katz, "Russian Activities in the Middle East," in *Russian Strategic Intentions: A Strategic Multilayer Assessment (SMA) White* Paper, ed. Nicole Peterson (Washington, DC: Department of Defense, May 2019), https://www.politico.com/f/?id=0000016b-a5a1-d241-adff-fdf908e00001.

³⁰¹ Katz, 61.

the United States and Russia in the Middle East; however, even though "Moscow genuinely fears Sunni jihadists, it seems much less interested in combating them (either by itself or with the US) than in buck-passing." Russia might not want to spend its finite resources on fighting terrorism; however, Chapter II showed that it sees terrorist groups moving into Russia as a threat to the state and might be willing to engage in diplomatic cooperation with the United States on those terms. 303

Common interests also exist in establishing codes of conduct. Kühn suggests, "Initial talks about avoiding accidental escalation should aim at commonly agreed-upon and adhered-to rules for preventing accidents in the busy civilian and military airspace over the Baltic Sea." Kühn continues, saying that "more ambitiously, Washington and Moscow should make continuous use of the readily available bilateral U.S.—Russian Agreement on the Prevention of Dangerous Military Activities." By utilizing already established informal agreements, the United States and Russia can take advantage of these shared interests to rebuild the diplomatic avenues necessary for deterrence. Other areas such as space and cyber space were suggested by multiple subject matter experts, including David Holloway and Leon Panetta, as a potential arena for diplomatic cooperation to develop an agreed-upon code of conduct. Similar products have been developed by private industry leaders such as Microsoft and could be used as a starting point for a multilateral informal agreement. NATO is an ideal format for the United States to gain leverage for such a proposal and then approach Russia with the suggestion at the NRC.

Other identified areas of mutual interest that could lead to productive diplomacy and cooperation are arms control, non-proliferation, safety and security of nuclear weapons, the desire for transparency, cyber space, future weapons, trade exchanges, terrorism, normative behavior, and the energy sector. In the arms control sector, the United

³⁰² Katz, 61.

³⁰³ Katz.

³⁰⁴ Kühn, Preventing Escalation in the Baltics, 63.

³⁰⁵ Kühn, 70.

³⁰⁶ Panetta, interview with author, December 16, 2019; Holloway, interview with author, November 14, 2019.

States and Russia could establish a formal or informal system to constrain intermediate range systems. The framework could allow both states to verify whether systems have nuclear or non-nuclear warheads, thus improving transparency and trust between the states. Each of these topics has an aspect that interests both the United States and Russia and could be used to open dialogue and further positive relations. But the effort from the United States and the willingness to receive the effort from Russia must be there, which requires communication and consistency.

B. SUB-CONVENTIONAL DETERRENCE

A deterrent strategy toward Russia's gray zone aggression requires an approach that crosses all elements of U.S. state power, focuses on shaping the adversary's costbenefit decision calculus, and induces restraint in the long-term use of sub-conventional aggression. Roberts explains, "We need an approach to deterrence suited to the landscape in front of us, not the one we inherited from the 25-year period after the Cold War." Steven Pifer concurs: "The U.S. does a good job deterring Russia at the nuclear and conventional level. In state-on-state fighting, the U.S. has both doctrine and visible forces presented in a way that Russia understands. At the sub-conventional level, it is imperative that the U.S. build a parallel structure to compete in this area." 308

The current landscape of great power competition is wrought with sub-conventional conflict, and the *National Defense Strategy* recognizes that countering this type of aggression requires all instruments of national power.³⁰⁹ Focusing on Russia's ends enables the United States to employ a proactive deterrence-by-denial strategy, which is then supported and strengthened by punishment when deterrence by denial fails. U.S. attempts to apply a deterrent strategy to the ways and means employed by Russia risks operating a purely reactive strategy unable to keep pace with Russia's ability to take advantage of emerging opportunities. Bragg explains, "Rather than focus on specific means

³⁰⁷ Roberts," It's Time to Jettison Nuclear Posture Reviews," 34.

³⁰⁸ Mr. Steven Pifer (nonresident senior fellow in the Arms Control and Non-Proliferation Initiative and the Center on the United States and Europe at the Brookings Institution), interview with author, October 25, 2019.

³⁰⁹ Department of Defense, National Defense Strategy, 5.

(which will continue to change), U.S. capabilities should focus on ends such as containing Russian influence and maintaining an international system consistent with U.S. interests."³¹⁰ A focus on ends, rather than ways and means, is another sharp break from strategic nuclear deterrence frameworks and is consistent with a shift from a zero-tolerance standard to a "cumulative deterrence" approach.

Recall from Chapter II that Russia's strategic ends include protecting the regime and state, gaining geopolitical dominance, being recognized as a great power, renegotiating the European security architecture, and weakening the cohesion of NATO and U.S. involvement. A U.S. strategy of deterrence against Russian gray zone conflict need only deter two of these four strategic ends: renegotiating the European security order and weakening the cohesion of NATO and U.S. involvement. This research has shown most of the literature and subject matter experts agree that although Russia is now much weaker than the United States as a state, it is still a great power. Recognizing this fact is something that the United States could use to leverage compliance with desired actions by Russia in the gray zone. If Russia is recognized as a great power on the international stage, it suggests that Russia accepts the norms of responsible state behavior and justified consequences by the international community when they are not followed. The following subsections describe in detail how both deterrence by denial and deterrence by punishment can be established at the sub-conventional level.

1. Sub-conventional Deterrence by Denial

Success of deterrence by denial relies on focusing U.S. instruments of power on deterring Russia's end goals rather than the means it uses to achieve them.³¹² A deterrence-by-denial strategy applied to the sub-conventional level against Russia includes reinvigorating alliances, strengthening ally capacity, fostering collaboration between the

³¹⁰ Bragg, "Defining the Competitive Zone," 133.

³¹¹ Manilov, "National Security of Russia; Oliker, "Unpacking Russia's New National Security Strategy"; Embassy of the Russian Federation to the United Kingdom, "Doctrine of the Russian Federation"; Buckholz et al., *Checkmating Russia's Assertiveness*. See also Appendix A.

³¹² Department of Defense, National Defense Strategy, 2.

U.S. government and the private sector, developing societal and infrastructure resilience, and reforming U.S. information operations.

a. Alliances

Through the nurturing of alliances, the United States can amplify its strengths, further its power projection, and increase its influence far beyond what Russia can counter. Throughout the research and the interviews, it was clear that a unilateral approach to the United States' deterring Russian gray zone aggression was not the most effective strategy, and it might not be successful. Mazarr explains, "The U.S. cannot deter Russia's gray zone by itself; it needs allies and partners because, in most cases, the U.S. is not the target of the gray zone actions—our partners are. If the targets of the aggression are not on board with the deterrent strategy, then it is not sustainable." Panetta explains, "The U.S. and NATO must operate from a position of allied strength, with a unity of mission, and consistently meet to discuss a cohesive strategy against the gray zone and hybrid warfare. The gray zone needs to be a priority for the U.S. and NATO." 314

Many of the subject matter experts believe that the key to a successful deterrent strategy against Russian gray zone conflict is political solidarity and cohesion. Holloway explains that the disarray of NATO and the instability of NATO states are the greatest threat to deterrence of Russian aggression. Holloway recalls that during the Cold War, the Marshall Plan was created on the basis of sustaining economic growth in Western European countries, and that was the best deterrent to the Soviet Union. Today, a deterrence strategy of Russia's gray zone aggression that focuses on Russia's end goals would prioritize denying the fracturing of the NATO alliance and U.S.–NATO cohesion. A unified NATO and strong U.S. alliance are necessary for a deterrence-by-denial strategy of this Russian strategic end.

³¹³ Mazarr, interview with author, December 17, 2019.

³¹⁴ Panetta, interview with author, December 16, 2019.

³¹⁵ Holloway, interview with author, November 14, 2019.

³¹⁶ Holloway, interview with author.

To do this, NATO, including the United States, must discuss on a regular basis the threat that Russia poses, come to a consensus on what it will not tolerate in the gray zone, and plan appropriate responses to such actions. Recently, NATO and the United States have begun such efforts through the NATO secretary's announcement that NATO could consider a cyberattack an armed attack and enact Article 5 and the recent increased attention that NATO has given to "hybrid warfare" in its doctrine and speeches. These efforts show that NATO and the United States are taking sub-conventional threats seriously; however, more work needs to be done to ensure member states are in consensus and have the solidarity, commitment, and political ties necessary to deny Russia's desire to fracture the alliance. To achieve these goals, Lute recommends "fostering the cohesiveness of NATO, signing the Trans-Pacific Partnership Agreement, where 12 democracies collaborate on a free trade arrangement, and improving trade relations with the EU, which together with the U.S. represents 50 percent of the world GDP." 317

Deterrence by denial of Russia's end goal also relies on European and Western cohesion. NATO and the EU share 22 member states, intertwining the organizations and providing an avenue for strengthening the two European institutions. Lute explains that a significant amount of responsibility for the avenues used to resist sub-conventional aggression, such as cyber resilience, national resilience, protection of borders, and energy diversification, falls on the EU.³¹⁸ This fact makes the synchronization and collaboration of NATO and the EU crucial to the deterrence-by-denial strategy. For example, when the EU develops cyber standards for its member states, those same standards should reflect in NATO as well.

b. Strengthening Ally Capacity and Resilience

Strengthening the capacity of U.S. allies promotes the deterrence of multiple Russian gray zone actions including military proxy forces, meddling in democratic processes, and disinformation campaigns to sow unrest. Roman Pyatkov asserts that to

³¹⁷ Lute, interview with author, November 26, 2019.

³¹⁸ Lute, interview with author.

counter Russian proxy forces, "the United States can increase the capabilities of allies and partners through training and equipment as being done now in Ukraine." Training and equipping allied partners to improve their ability to defend their own borders bolster deterrence through the credibility of physically denying an objective; however, physical denial is only a small piece of the strategy. The United States can also increase its allies' capacity through technical assistance and funding that can be leveraged to build or improve their ability to detect and counter Russian disinformation. A state's aim should be to produce a counternarrative to the propaganda, highlighting the facts and identifying the propaganda. Through information sharing between allied governments and civilian organizations, the United States and NATO can assist in educating the public about the influence Russia is attempting to gain, which bolsters credibility for host nation governments and strengthens democratic institutions.

In the same spirit, identifying Russian propaganda can reduce the risk of domestic unrest and deny Russia's end of fracturing the NATO alliance. Much Russian disinformation and propaganda target minority populations, and a risk to the NATO alliance would be this type of tactic directed at NATO member states such as Estonia, Latvia, and Lithuania. As Kühn explains,

Civilian resilience measures are better tools for dealing with most of Russia's NGW [new-generation warfare] tactics. In particular, increasing the resilience of ethnic Russians in the Baltic states to Russian propaganda should become a key feature of NATO policy. The example of Ukraine, though very different compared to the three Baltic states, shows that existing ethnopolitical tensions can serve as a gateway for Russian intervention. 320

This type of attack would challenge the NATO alliance's fortitude in heeding the call of a member state that asks for help against a threat that does not meet the Article 5 standard. However, NATO must prepare its member states beyond military resilience by improving

³¹⁹ Roman Pyatkov, "Potential Global Actions to Counter Provocative Russian Activities," in *Russian Strategic Intentions: A Strategic Multilayer Assessment (SMA) White Paper*, ed. Nicole Peterson (Washington, DC: Department of Defense, May 2019), 93, https://www.politico.com/f/?id=0000016b-a5a1-d241-adff-fdf908e00001.

³²⁰ Kühn, Preventing Escalation in the Baltics, 60.

their capabilities to detect and attribute disinformation. To do this, NATO must make state resilience a priority. Kühn provides another similar suggestion for NATO: to "closely monitor the state of integration, rights, and treatment of Russian minorities in the Baltics, and to intervene, perhaps through a special civilian monitoring and advisory mission, in cases of concern."³²¹ This type of organization could communicate NATO's resolve to identify and deter these types of actions.

The United States can also strengthen its allies' capability and resilience through economic means, particularly, by reducing their reliance on Russian energy sources. A 2019 report suggests that "by collaborating with the European Union (EU), it [the United States] should finalize a bilateral trade agreement that not only bolsters the economies of its allies but also weakens Russia's capacity for economic coercion." Trade agreements with the EU bolster the economic independence of NATO and U.S. allies while reducing Russia's economic growth potential. The report also suggests that these trade agreements would only be strengthened with economic assistance to former Soviet bloc states to diminish their dependence on Russian assistance.

Pyatkov explains, "Russia presents a challenge in the unique way it uses its stateowned hydrocarbon companies to pursue political objectives." Currently, some European states are vulnerable to coercion and even harassment from Russia due to their energy independence. Jason Werchan, strategy program manager for the Russia Strategic Initiative, elaborates:

Thirteen Eastern European countries rely on Russia to provide 75% or more of total natural gas imports, and many of these countries have no domestic natural gas production. Russia also provides Europe with roughly 32% of its total energy imports, with five countries (Belarus, Bulgaria, Finland, Lithuania, and Poland) reliant on Russia for more than 70% of their total imports. Russia has used this dependence as a tool to affect U.S. partner and ally decision-making, or as a punitive response to decisions made by nations

³²¹ Kühn, 61.

³²² Michael C. McCarthy, Matthew A. Moyer, and Brett H. Venable, *Deterring Russia in the Gray Zone* (Carlisle Barracks, PA: U.S. Army War College Press, March 2019), xx, https://publications.armywarcollege.edu/pubs/3687.pdf.

³²³ Pyatkov, "Potential Global Actions," 92.

not aligned with Russian interests. Russian presence, market share, and ownership in European energy sectors are often followed by illicit activities, bribery, and corruption.³²⁴

Providing U.S. allies in Europe with an alternative to Russian energy removes the leverage and influence Russia has over those states. This is not a cheap or fast strategy; however, by diversifying energy sources or investing in alternative energy for European allies, the United States and NATO can arrest Russian influence and bolster European cohesion through a shared interest of energy independence in the long term. This avenue would be a costly but worthy undertaking toward the deterrence of Russian sub-conventional aggression against smaller NATO allies. This tactic does not suggest denying Russia the status of a great power or regional sway; it is only to reinforce deterrence toward Russia vis-à-vis NATO states in the region. Werchan suggests increasing authorities and resources for the United States that would "prioritize securing shipping lanes and commerce globally to allow for the free flow of crude oil, liquid fuels, coal, and greater quantities of liquid natural gas." 325

There is proof that these alliances can deter Russian gray zone conflict. Ariel Cohen indicates that in Georgia, "in 2008, the Russians intended to remove the Saakashvili regime and take Tbilisi. They failed to do so, because the leaders of Poland, the Baltic states, and Ukraine gathered in Tbilisi, and because the Europeans and United States pushed Moscow to stop the aggression."³²⁶ Holloway asserts, "The U.S. has a lot of potential influence and power, but it is not using it in the best way."³²⁷ Holloway stresses that, ultimately, to deter Russian gray zone conflict, "the U.S. needs a well-thought-out, consistent policy toward

³²⁴ Jason Werchan, "Required U.S. Capabilities for Combatting Russian Activities Abroad," in *Russian Strategic Intentions: A Strategic Multilayer Assessment (SMA) White Paper*, ed. Nicole Peterson (Washington, DC: Department of Defense, May 2019), 137, https://www.politico.com/f/?id=0000016b-a5a1-d241-adff-fdf908e00001.

³²⁵ Werchan, "Capabilities for Combatting Russian Activities," 137.

³²⁶ Ariel Cohen, "The Russo-Georgian War's Lesson: Russia Will Strike Again," Atlantic Council, August 10, 2018, https://www.atlanticcouncil.org/blogs/new-atlanticist/the-russo-georgian-war-s-lesson-russia-will-strike-again/.

³²⁷ Holloway, interview with author, November 14, 2019.

the gray zone that deploys punishment and diplomacy but also includes alliances and shows the credibility of commitment to NATO."328

c. Government-Civilian Collaboration

Deterring Russia's continuing use of expedient and increasingly hard-to-detect gray zone tactics in the information space requires that the United States partner with private organizations to fill the gaps in its technological capacity and personnel. The 2017 *National Security Strategy* recognizes that U.S. "diplomatic, intelligence, military, and economic agencies have not kept pace with the changes in the character of competition." In addition, "to meet these challenges we must also upgrade our political and economic instruments to operate across these environments. . . . By aligning our public and private sector efforts we can field a Joint Force that is unmatched." By partnering with private companies and non-governmental organizations, the United States can improve its ability to detect, attribute, and counter or deny Russian disinformation and interference in democratic processes. Panetta explains that the United States is behind in identifying and responding to threats in the information space. Panetta states, "Part of the issue is that sometimes the U.S. takes for granted its strength, which causes it to be lax in developing the innovative and creative approaches that it needs." 331

To address the capability gap, a team of analysts from RAND encourage Washington to "fund academia to develop better tools for identifying and attributing disinformation on social media." Whether they be private companies, nongovernmental organizations, or academia, the U.S. government needs to partner with outside entities to increase its ability in the information space. Stacie Pettyjohn and Becca Wasser of RAND suggest, "Civil organizations . . . might be best positioned to counter most Russian gray

³²⁸ Holloway, interview with author.

³²⁹ Trump, National Security Strategy, 28.

³³⁰ Trump, 28.

³³¹ Panetta, interview with author, December 16, 2019.

³³² Elizabeth Bodine-Baron et al., *Countering Russian Social Media Influence* (Santa Monica, CA: RAND Corporation, 2018), xiii, https://www.rand.org/pubs/research_reports/RR2740.html.

zone tactics."³³³ They elaborate, saying that this battle is "primarily a social, political, and economic fight—not a military one, . . . better waged by civilian agencies and nongovernmental organizations, whose core competencies lie in these domains."³³⁴

Panetta recognizes that "the relationship between the Defense Department, intelligence agencies, and private industry is not as good as it should be" and recommends two routes for improvement: one in the near term and one that will take longer to develop.³³⁵ In the near term, Panetta suggests developing a gray zone task force composed of the CIA, NSA, Department of Defense, Department of State, and possibly other interested organizations to coordinate a centralized effort to address gray zone conflict. 336 For a longer-term approach, Panetta suggests establishing a government entity similar to but beyond the Defense Advanced Research Projects Agency that would form an innovative partnership with the public and private sectors to mobilize the best American efforts toward gray zone conflict—the Manhattan Project of today if you will. 337 Werchan agrees: "Once defined, a federal agency dedicated to gray zone activities may be required in order to implement a true whole-of-government approach to combatting Russian influence activities abroad."338 By identifying disinformation being propagated to the American people and having a mechanism to counter it, the United States can deny Russia's end goal of sowing discord and unrest among the American public to divide the population and arrest progress in Washington.

³³³ Stacie L. Pettyjohn and Becca Wasser, *Competing in the Gray Zone: Russian Tactics and Western Responses* (Santa Monica, CA: RAND Corporation, 2019), 43, https://www.rand.org/content/dam/rand/pubs/research_reports/RR2700/RR2791/RAND_RR2791.pdf.

³³⁴ Pettyjohn and Wasser, 43.

³³⁵ Panetta, interview with author, December 16, 2019.

³³⁶ Panetta, interview with author.

³³⁷ Panetta, interview with author.

³³⁸ Nicole Peterson, "Executive Summary," in *Russian Strategic Intentions: A Strategic Multilayer Assessment (SMA) White Paper*, ed. Nicole Peterson (Washington, DC: Department of Defense, May 2019), vi, https://www.politico.com/f/?id=0000016b-a5a1-d241-adff-fdf908e00001.

d. Developing Infrastructure and Social Resilience

Developing resilience in the societies and infrastructure of the United States and NATO could be one of the most crucial factors in deterring Russian gray zone aggression, as it inherently denies Russia's ends by reducing the effectiveness of its strategies. Bolstering a strategy of deterrence by denial through resilience incorporates all aspects of a state's system including its infrastructure and society, which requires education, comprehensive integration, and societal cohesion and healing. As Pettyjohn and Wasser explain,

Russia's gray zone tactics will persist and should be countered by hardening Western societies against propaganda and attempts to undermine democracy. However, overreaction only serves Moscow's purposes. Strong civil societies and robust democratic institutions, rather than panic at "losing" or attempts to fight Russia blow-by-blow, are the West's best defenses against Russia's gray zone tactics. Russia's gray zone tactics signify its weakness, and the West's stronger political, cultural, and social systems will prevail over them if given the chance.³³⁹

Russia seeks to reduce U.S. influence and involvement in Europe through information campaigns, disinformation, and cyberattacks to interfere in democratic processes and arrest the progress of Washington. Jeffrey Larsen explains, "When facing non-linear threats that target the whole-of-society, one's response has to be broad and comprehensive." 340

Resilience is defined as the "ability of the community, services, area or infrastructure to detect, prevent, and, if necessary to withstand, handle and recover from disruptive challenges." Resilience encompasses not only the physical infrastructure of a state but also its services and ability to work together with its society to continue to function under strain or recover from a loss of service or attack. Resilience, therefore, "aims

³³⁹ Pettyjohn and Wasser, Competing in the Gray Zone, xi.

³⁴⁰ Jeffrey Larsen, "New Research Division Publication: 'Deterrence through Resilience—NATO, the Nations and the Challenges of Being Prepared,'" NATO Defense College, May 31, 2017, http://www.ndc.nato.int/news/news.php?icode=1060.

³⁴¹ "Resilience," *U.K. Civil Protection Lexicon*, version 2.1.1, February 2013, https://www.gov.uk/government/publications/emergency-responder-interoperability-lexicon#history, quoted in Lasconjarias, "Deterrence through Resilience."

at being prepared"—that is, having "the ability to prepare and plan for, absorb, recover from, and more successfully adapt to adverse events." 342

Achieving resilience in each of these areas at a level that would dissuade Russia from utilizing gray zone aggression requires a fundamental shift in priority and attention to the issue, which has started to occur but needs rapid development. Larsen demonstrates that during the Warsaw Summit in July 2016, "heads of state and government committed themselves to enhance resilience as the basis for credible deterrence." The members of the summit pledged to "continue to enhance . . . resilience against the full spectrum of threats, including hybrid threats, from any direction. Resilience is an essential basis for credible deterrence and defence and effective fulfilment of the Alliance's core tasks." Reducing U.S. and NATO vulnerabilities limits Russia's ability to achieve its end objective, limits the possibility of an attack, and reinforces deterrence.

While partnerships with private industry are critical to fill the gaps in cyber capabilities and expedient innovation, relying on private entities for many of the services and infrastructure of the state could create a national security vulnerability. The infrastructure and systems of states are becoming increasingly reliant on private entities for critical support in everything from military transportation to information technology systems. This integration has left the United States and NATO at risk of an attack that would not require armed conflict. Lasconjarias shows that "typically, in large [NATO] operations, around 90% of military transport is accomplished using civilian assets chartered from the private sector. Over 50% of communications for military purposes are transmitted through civilian satellites, and roughly 75% of host nation support to NATO forces is sourced from local commercial infrastructure and services." 345

³⁴² National Research Council, *Disaster Resilience: A National Imperative* (Washington, DC: National Academies Press, 2012), 1.

³⁴³ Larsen, "New Research Division Publication."

³⁴⁴ Lasconjarias, "Deterrence through Resilience," 1.

³⁴⁵ Lasconiarias, "Deterrence through Resilience," 5.

If Russia observes that a cyberattack on U.S. or NATO commercial infrastructure and systems can render its military less effective or delay reinforcements from the VJTF into the Baltics, the established conventional stability is at risk. The likelihood of a large-scale attack of this magnitude by Russia is unlikely considering the likely overwhelming response from the United States and NATO. However, Russia is likely capable and willing to conduct multiple smaller attacks on commercial entities to frustrate and degrade state infrastructure. To deter such attacks, the United States and NATO need to invest in robust countermeasures, security, and redundancy in their infrastructure and systems. To achieve this, state governments will need to partner with the civilian sector to make each actor in the chain aware of the threat, invested in the solution, and educated on how to implement it. This will also require government funding or incentives for competitive, for-profit companies to comply.

Democratic institutional processes must also be protected, defended, and bolstered. Lute recalls that "with regard to the Russian attack on the 2016 U.S. presidential elections, the election system was not robust enough, was not secure enough, was not resilient enough for Russia to calculate that it was not worth trying." Russia was able to successfully sow doubt among the American public. Investing in societal education and providing information at every level of the population is necessary to develop comprehensive state resilience. It has been said that NATO's aim to strengthen "civil preparedness" to deter against attack is "a question not only of retaining the confidence of one's population, but also of sticking to the core values on which the Alliance is built—where the social contract demands that the government care for its people." The best way for the United States and NATO to deter this kind of sub-conventional aggression is to use their strength as democratic nations to deny Russian ends through educating their public, students, diplomats, and military leaders.

NATO member state Latvia and partner Sweden demonstrate current education and integration initiatives that the United States and the rest of NATO could adapt and

³⁴⁶ Lute, interview with author, November 26, 2019.

³⁴⁷ Lasconiarias, "Deterrence through Resilience," 5.

implement. These initiatives aim to transform the perceived vulnerabilities of the United States and NATO states into strengths and assets in the deterrence of Russian gray zone aggression by educating societies on the importance of their role and equipping them with the skills to identify disinformation, effect change in their communities, instill confidence in their national governments, and continue to function during crises.

Currently, Latvia has a national defense curriculum for public education. The Latvian *Comprehensive National Defence* document explains that "respect for Latvia's statehood, inhabitants and national security should be taught from the first years of primary education. Education should promote critical thinking and patriotism." The document declares that "teachers should be trained on how to deliver those skills to children. National defence school courses are a first step towards a more coordinated and integrated way of promoting the sense of duty." The program's curriculum is directed toward high school students, and full implementation should be complete by 2025 when it will include all schools. The program includes topics related to national security and related skills including situational awareness (ability to act appropriately in critical situations), understanding the role of citizens in defense, basic military and defense skills (including physical training, discipline, and communications), civic engagement, leadership, and teamwork. 350

Latvia's high school education program is only a small piece of the education needed for comprehensive societal resilience; however, it is an outstanding example of how to prepare a society through education of its future leaders and citizens. Latvia's teenagers are developing skills and knowledge that prepare them to be active participants in the state's deterrence posture and strategy through understanding society's role, remaining calm and confident in the state's ability during crises, and aiding in organizing their community in support of the overarching deterrence policy.

³⁴⁸ Latvian Defence Ministry, *Comprehensive National Defence in Latvia* (Riga: Latvian Defence Ministry, 2018), 4, https://www.mod.gov.lv/en/nozares-politika/comprehensive-defence.

³⁴⁹ Latvian Defence Ministry, 4.

³⁵⁰ Braw, "From Schools to Total Defence Exercises," 2.

Another potential avenue for societal education to bolster resilience is the military. The U.S. military and many other NATO nations' forces have professional development for both their officers and non-commissioned corps. This existing framework is ripe for the integration of civil resilience education. Lasconjarias highlights that the military's "unique ability to change the syllabus on a regular basis to cope with an evolving security environment not only provides a model but sets some standards and blueprints." A military setting with officers and non-commissioned officers who are familiar with national security and attuned to the need for resilience is ideal for developing and refining these education initiatives. Once the curriculum is polished, it can be disseminated for civil government, academia, and public use to enlighten and inform society.

Sweden—a NATO partner but not a member state—has an innovative approach to transforming its society from a vulnerability to a deterrent asset. In 2020, Sweden is conducting a total defense exercise aimed at "reinforcing its national defense capacity as part of the efforts to strengthen defense by protecting vital society functions and the civilian population." The exercise focuses on the 2017 Russian NotPetya virus, which significantly disrupted global shipping and major international companies. Participants in the exercise hail from all levels of society, from across each municipality, and include civilian, military, and national authorities to spearhead efforts in linking resources for national defense and deterrence. As part of the exercise, participants will gain knowledge of how essential services and functions continue to run during a crisis or attack. Participants will also gain skills in civil—military communication, chain of command, and coordination from the regional to the state level. Lastly, the exercise includes elements designed to "coordinate communication to the civilian population and to identify enemy information operations." Providing local-level agencies the ability to identify disinformation enables

³⁵¹ Lasconjarias, "Deterrence through Resilience," 8.

³⁵² "Total Defence Exercise 2020," Swedish Armed Forces, accessed March 12, 2020, https://www.forsvarsmakten.se/en/activities/exercises/total-defence-exercise-2020/.

^{353 &}quot;Petya Ransomware," Cybersecurity and Infrastructure Security Agency, last modified February 15, 2018, https://www.us-cert.gov/ncas/alerts/TA17-181A.

³⁵⁴ Swedish Armed Forces, "Total Defence Exercise 2020."

them to share the burden of countering Russian information operations that target civil populations. Local governments are often able to communicate more effectively and expediently with their constituents than strategic state-level organizations can, thereby reducing the impact of disinformation on society.

In addition to the exercise, Sweden distributed a booklet to all households detailing what to do in case of crisis or war. Braw explains, "Providing easy-to-understand information about how to act in a crisis contributed to the combined deterrent and defense shield of Sweden." She continues: "The brochure was a clever strategic communication move, signaling to aggressors that the Swedish government is serious about tapping into the public's potential." This exercise and brochure serve to educate, inform, and integrate the whole of society in Sweden so that the state is better prepared for a crisis and able to detect and counter Russian disinformation, thus bolstering resilience and deterrence overall.

State and societal resilience is a fundamental aspect of a deterrent policy against sub-conventional warfare; however, it requires that societies be cohesive, at least in the sense of believing in a common defense. Jeremy Lamoreaux of Brigham Young University highlights an important prerequisite for such initiatives: "The U.S. needs to encourage societal healing." Jamoreaux goes on to explain that "many states across Eastern Europe suffer from tensions between different ethnic/religious/linguistic groups. The Baltic States, especially Estonia and Latvia, are experiencing this tension between ethnic Baltics and ethnic Russians." This ethnic tension leaves these NATO nations susceptible to Russia's compatriot strategy, as described in Chapter II. Lamoreaux suggests, "If Russians were finally afforded equal rights, the ethno-linguistic Russian population would have considerably less incentive to believe Russia's propaganda about

³⁵⁵ Braw, "From Schools to Total Defence Exercises," 3.

³⁵⁶ Braw, 3.

³⁵⁷ Jeremy W. Lamoreaux, "Countering Russian Influence in the Baltic States," in *Russian Strategic Intentions: A Strategic Multilayer Assessment (SMA) White Paper*, ed. Nicole Peterson (Washington, DC: Department of Defense, May 2019), 96, https://www.politico.com/f/?id=0000016b-a5a1-d241-adff-fdf908e00001.

³⁵⁸ Lamoreaux, 96.

having a moral high ground. Instead, being treated equally could undermine Russia's arguments in this regard."³⁵⁹ In not only the Baltic states but also in the United States and NATO, the unification of societies and equal treatment of citizens will diminish Russia's influence significantly and contribute to overall deterrence and resilience.

The described initiatives, education programs, and societal healing are defensive in nature and serve to affect Russia's cost–benefit calculus that its action will not be worth the cost, or that it will not be capable of achieving its objective based on the comprehensive resilience of the state and society.

e. U.S. Information Operations

Leon Panetta highlights that "the U.S. has come a long way since the Voice of America in terms of how it deals with Russia; however, the U.S. has not developed ways to use information as effectively as Russia has in its approaches toward the U.S." Unlike the United States, Russia makes regular use of social media and information campaigns to influence the opinion of the U.S. population and encourage disunity of the state. The United States primarily lacks gray zone capabilities in the information operations space.

During the interviews for this research, the subject matter experts were asked whether they believed the United States did enough to inject information operations into its policy. The answers were a unanimous and resounding "no." Roberts explains that how the U.S. and its allies engage in the gray zone requires that they "become effective at using the gray zone proactively to accomplish high-level foreign policy and national security objectives of their own." Deterring Russian gray zone aggression requires that the United States improve its information operations capabilities through countering Russian disinformation, capitalizing on Russian behavior, exposing corruption, and learning from past and present actions. Pyatkov explains, "The most effective antidote to propaganda"

³⁵⁹ Lamoreaux, 96.

³⁶⁰ Panetta, interview with author, December 16, 2019.

³⁶¹ Roberts," It's Time to Jettison Nuclear Posture Reviews," 35.

[today] is free press, backed up by resilient democratic institutions."³⁶² Combined with this chapter's earlier recommendation to bolster and secure democratic institutions and processes, the U.S. ability to preserve the freedom of the press and provide factual information to the American public is a key component in denying the success of Russian information operations. Unfortunately, as Petraeus explains, "The United States information operations capabilities and doctrine have always been inadequate."³⁶³ Bolstering those capabilities is crucial to a successful deterrent strategy of subconventional warfare against Russia, where information operations are a bulk of the behavior.

Anthony Cordesman explains the breakdown in U.S. capabilities: "The U.S. has a problem where it confuses spin and public relations with information operations, and far too often what it does is provide public relations support for operations rather than use information strategically." To remedy this problem, the United States must develop information operation capabilities both within the government and in partnership with private entities, as recommended in the previous sections. This partnership will allow the United States to fill gaps in its capabilities and identify Russian propaganda and disinformation campaigns earlier in the cycle, giving the U.S. government an opportunity to counter the propaganda with factual information.

Steven Pifer suggests going as far as outsourcing the task to entities such as Bellingcat, a team of global online investigators who identify disinformation and publish articles, stories, videos, and posts exposing the propaganda and providing the facts about an incident or story. This organization and others like it are at the tip of the spear in denying the effects of Russian disinformation. Pifer explains the importance of these types of non-governmental organizations is the speed at which they can identify and counter the Russian narrative. Pifer highlights, "To do this through the official channels of the state,

³⁶² Pyatkov, "Potential Global Actions," 51.

³⁶³ Petraeus, interview with author, October 31, 2019.

³⁶⁴ Cordesman, interview with author, November 7, 2019.

³⁶⁵ Pifer, interview with author, October 25, 2019.

the intelligence community would have to verify every piece of information, and the bureaucracy would need to approve each submission, which would slow the process and negate the effort." Through partnerships with outside organizations such as Bellingcat, the United States could moderate activity under a set of ground rules that would remove the constraints of time while adhering to the standards and values of freedom of the press and providing the American people with factual information. Pifer reiterates, "To the extent that you want to counter Russian propaganda, you have to do it within hours—you cannot wait days or weeks." 367

In addition to countering Russian propaganda, multiple subject matter experts expressed that the United States must monitor and fact-check Russian media outlets such as Russia Today and Sputnix. These outlets are aired on many television networks in Europe and boast a large viewership. The United States must monitor the credibility of these media outlets and interject when disinformation is broadcast either by undermining their credibility or by exposing the propaganda. As analysts from RAND explain, "Ambiguity is a defining characteristic of the gray zone." 368 U.S. exposure of Russian disinformation and propaganda can dissolve the advantage that ambiguity provides and allow the United States to address the issues directly, in the public eye of the international community.

Another avenue for exposing Russian propaganda is through social media. Pyatkov explains that social media can be used as an asset for the U.S. information operations strategy instead of being a vulnerability that Russia can exploit. Pyatkov suggests,

The U.S. government can expose Russian propaganda efforts to the U.S. and allied publics to educate their societies on specific Russian provocative actions. The advantage for the United States is that American companies such as Google, Twitter, and Facebook are at the forefront of social media while at the same time are subject to U.S. oversight. This means that the

³⁶⁶ Pifer, interview with author.

³⁶⁷ Pifer, interview with author.

³⁶⁸ Becca Wasser et al., *Gaming Gray Zone Tactics: Design Considerations for a Structured Strategic Game* (Santa Monica, CA: RAND Corporation, 2019), 36, https://www.rand.org/pubs/research_reports/RR2915.html.

United States can use legislative actions to expose Russian actors spreading propaganda on those platforms.³⁶⁹

In 1947, in an article for *Foreign Affairs*, George Kennan described his containment strategy for the Soviet Union: "The main element of any United States policy toward the Soviet Union must be that of a long-term, patient but firm and vigilant containment of Russian expansive tendencies." Kennan's original premise was that containing the Soviet Union forced the state to deal with its own internal strife. He had argued that the Soviet Union had an expansionist strategy as a way of ignoring its own contradictions, and containment was a way to force the Soviet Union to look inward and address them. Today, Kennan's idea of containment is applicable to a U.S. gray zone strategy that exposes Russian contradictions as a kleptocracy wrought with corruption, a stagnated economy, and a dissatisfied public. Texposing Russian behavior forces the state to answer to its public and the international community. Recall from Chapter II that one of Russia's strategic goals is to be recognized as a great power. The United States can use this end to amend some of Russia's behavior that runs counter to that goal.

U.S. information operations can aid in damaging Russia's reputation by exposing its actions that run counter to the acceptable behavior of a great power. Joseph Siegle explains, "Russia's propping up of unpopular regimes that are resistant to power sharing (such as in Algeria, South Sudan, Sudan, and Zimbabwe) should be publicized for both African and international audiences." Siegle expresses that these regimes, supported by Russian military and finances, use coercion to silence their populations and remain in power. These regimes bring deplorable living conditions, overreaching governments, and rampant corruption to their populations because of Russian support. Siegle denotes that "the Russian link to instability and exclusionary regimes needs to be conveyed to African

³⁶⁹ Pyatkov, "Potential Global Actions," 92–93.

³⁷⁰ George Kennan, "The Sources of Soviet Conduct," *Foreign Affairs*, July 1947, https://www.foreignaffairs.com/articles/russian-federation/1947-07-01/sources-soviet-conduct.

³⁷¹ Pifer, interview with author, October 25, 2019.

³⁷² Joseph Siegle, "US Response to Russian Activities in Africa," in *Russian Strategic Intentions: A Strategic Multilayer Assessment (SMA) White Paper*, ed. Nicole Peterson (Washington, DC: Department of Defense, May 2019), 120, https://www.politico.com/f/?id=0000016b-a5a1-d241-adff-fdf908e00001.

citizens—through multiple channels, including trusted media, civil society, and social media networks. This awareness-raising will create additional pressure on complicit national leaders while establishing a reputational cost for Russia."³⁷³

This disposition is also evident in Russia's annexation of Crimea. Holloway explains, "These actions have helped to create anti-Russian feelings among Ukrainians and even its own population." The director of the Levada Center, Lev Gudkov, explains that "the 'Crimea effect,' particularly popular approval of Russia's foreign policy as a reemerging great power, was waning in part because Russians increasingly believe that the Kremlin's pursuit of its geopolitical goals comes 'at the [social and economic] expense of the population." The group of the population activities can create backlash and unintended consequences for Russia. Washington needs to capitalize on these actions by highlighting to the international community the aggressive nature of Russia's regime and its actions.

Michael Mazarr maintains, "The U.S. needs to incorporate a coherent strategy for being a megaphone to constantly (through multiple avenues including social media, broadcasting, and sponsoring investigative reporting) expose the evidence of Russian actions that further undermine its [Russia's] position." Because Russia desires international legitimacy and recognition as a great power, a strategy that highlights its actions and enables states to see its malevolence could change Russia's decision calculus for parts of its gray zone actions by increasing the cost. A recent example of this is Secretary Pompeo's press release condemning Russia's cyberattack on Georgia. Pompeo stated, "This action contradicts Russia's attempts to claim it is a responsible actor in cyberspace and demonstrates a continuing pattern of reckless Russian GRU [military foreign-intelligence service] cyber operations against a number of countries. These operations aim to

³⁷³ Siegle, 120.

³⁷⁴ Holloway, interview with author, November 14, 2019.

³⁷⁵ Thomas Sherlock, "Russian Society and Foreign Policy: Mass and Elite Orientations after Crimea," *Problems of Post-Communism* 67, no. 1 (2020): 2, https://doi.org/10.1080/10758216.2018.1561190.

³⁷⁶ Mazarr, interview with author, December 17, 2019.

sow division, create insecurity, and undermine democratic institutions."³⁷⁷ Importantly, a campaign to shame bad Russian behavior also strengthens the offer to credit good Russian behavior that is at the heart of the strategy, outlined earlier in this section, to combine subconventional deterrence with assurance by recognizing Russia as a great power on the international stage so long as its behavior exhibits the norms of responsible state behavior.

f. Learning from Past and Present Actions

Washington does not have to develop information operations from scratch; there are multiple examples of successful historical cases and current initiatives to emulate or adapt. During the interviews, multiple subject matter experts referenced a time during the Cold War that the United States employed a robust and successful information operations campaign. Cordesman recalls that "the U.S. did a much better job utilizing information operations during the Cold War. It employed deception and information operations (both black and white) and was willing to use foreign media, foreign reporters, third parties, and proxies with a great deal of focus. The U.S. utilized its communications assets in ways that have almost been forgotten."378 Not only did the United States employ information operations more effectively in the Cold War; NATO did as well. Lasconjarias shows that "the Alliance and member states actually practiced counter-propaganda, used information campaigns to sway opinion away from communist infiltration of Western states' intellectual domain, and engaged in aggressive counter-espionage and similar activities."379 Today's security environment is more multifaceted and makes information operations more difficult; however, it is worthwhile for U.S. policymakers and strategists to review the covert actions and information operations of the Cold War to help develop today's strategy.

A current exemplar of information operations is found in Lithuania, with a program that starts with civilian volunteers. Lasconjarias describes how "in 2016, a number of Lithuanians began fighting back against the extensive disinformation about their country

³⁷⁷ Pompeo, "United States Condemns Russian Cyber Attack."

³⁷⁸ Cordesman, interview with author, November 7, 2019.

³⁷⁹ Lasconjarias, "Deterrence through Resilience," 8.

disseminated by Russian trolls by scouring social media and reporting such content to relevant platforms." ³⁸⁰ These volunteers, who called themselves "the Elves," joined forces with global and local companies such as Google and Delfi to intercept Russian disinformation using a website called Demaskuok. ³⁸¹ Reports show that the Elves can detect and intercept approximately "90% of disinformation spread on the internet, in as little as two hours." ³⁸² The speed and accuracy in which these volunteers can detect and intercept propaganda dramatically reduce the effectiveness of Russia's propaganda. Reducing the number of consumers of the disinformation denies nearly all potential effects of the information campaign. Lasconjarias explains, "The power of disinformation rests on its first-mover advantage: while debunking is a worthy effort, the damage has often already been done." ³⁸³ Proactively searching for and dismantling Russian propaganda adds immense value to any state's deterrence-by-denial strategy by diminishing Russia's costbenefit analysis.

2. Sub-conventional Deterrence by Punishment

Deterrence by denial is a fundamental building block in a successful deterrent strategy toward Russia's gray zone. However, as the members of the Multinational Capability Development Campaign (MCDC) put it, to "effectively enforce the rules of the game and change Russia's behavior will require a renewed focus on deterrence by punishment below the threshold of war." The addition of punishment through a deterrence-by-denial strategy serves to impose restrictions on the sub-conventional level by altering Russia's decision calculus that it can operate with impunity. Petraeus explains, "To stop aggressive Russian behavior, the U.S. must take action that is firm but not

³⁸⁰ Braw, "From Schools to Total Defence Exercises," 3.

³⁸¹ "Home Page," Demaskuota, accessed March 12, 2020, https://demaskuok.lt/.

³⁸² Braw, "From Schools to Total Defence Exercises," 3.

³⁸³ Braw 3.

³⁸⁴ Multinational Capability Development Campaign, "Deterrence by Punishment as a Way of Countering Hybrid Threats—Why We Need to Go 'Beyond Resilience' in the Gray Zone" (Geneva: Multinational Capability Development Campaign, March 2019), 1, https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/783151/20190304-MCDC_CHW_Information_note - Deterrence by Punishment.pdf.

provocative."³⁸⁵ U.S. punitive strategy must walk the fine line of being decisive in action without escalating out of proportion. Most of the subject matter experts expressed that deterrence by punishment should be aimed at some of the most aggressive or severe gray zone actions that the United States can credibly signal it is not willing to accept. Examples include the physical infiltration of a sovereign nation, interference in the democratic process, the use of proxy forces that endangers U.S. interests or service members, and any action inconsistent with the international norms of responsible state behavior, such as the use of chemical weapons in an assassination attempt on European soil.

These punitive actions can and should utilize all aspects of state power including diplomatic, information, military, and economic. However, punitive deterrence relies on attributing the aggressive actions to Russia. Attribution in the gray zone is difficult but not impossible, and it is easier if the action is at a higher level or more aggressive. Members of the MCDC explain, "Recent examples—such as interference in U.S. and French elections, or the 'Bundestag hack' in 2016—show that it was possible to trace and attribute responsibility." ³⁸⁶ In a report from RAND, analysts lay out three levels of the gray zone, two of which are designated as "usually attributable." ³⁸⁷ A chart by RAND, reproduced in Table 1, gives a clear representation of the types of gray zone actions on which Washington can focus its deterrence-by-punishment efforts.

³⁸⁵ Petraeus, interview with author, October 31, 2019.

³⁸⁶ Multinational Capability Development Campaign, "Deterrence by Punishment," 3.

³⁸⁷ Lyle J. Morris et al., *Gaining Competitive Advantage in the Gray Zone: Response Options for Coercive Aggression Below the Threshold of Major War* (Santa Monica, CA: RAND Corporation, 2019), 137, https://www.rand.org/content/dam/rand/pubs/research_reports/RR2900/RR2942/RAND_RR2942.pdf.

Table 1. Levels of Gray Zone Activities³⁸⁸

Level	Characteristics	Examples
Aggressive	 Direct quasi-military or military action Usually attributable Significant threat to territorial integrity or sovereignty Forces an immediate binary choice in response Often a clear violation of international law 	Seizing of new territory in the ECS or SCS; kinetic force against NATO troops or nations or against Japanese or Philippine troops or assets
Moderate	 Direct action, though often in nonmilitary form Usually attributable Goal is establishing claims and coercion Does not immediately threaten territorial integrity Legal status of actions is highly contested 	Estonia cyberattack; ramming of vessels in the ECS and SCS; fishing boat swarms; declaring an ADIZ in the SCS; economic coercion; closing of borders
Persistent	 Broad-based, low-level routine actions as part of a campaign Does not clearly violate any international law or norms Ongoing pattern rather than individual events Often done in a way that clouds attribution 	Broad disinformation or messaging efforts; Chinese passage through Senkaku territorial seas; Chinese maritime militia presence in disputed waters

When actions in the gray zone fall under the category of attributable—either because the United States and NATO have done the work to attribute the actions or because the actions are inherently attributable (such as political claims to territory)—states tend to hide behind the legal, moral, or political justification of an action. Russia uses this tactic when it seizes territory and uses the justification of defending ethnic Russians through expensive information campaigns. McCarthy, Moyer, and Venable assert, "These tactics complicate the task of generating a local response, as well as enforcing punishments." To make a credible deterrent threat, the United States must address this type of political and legal justification for illicit gray zone behavior through diplomatic channels and solidarity with its allies.

³⁸⁸ Source: Morris et al., Gaining Competitive Advantage in the Gray Zone, 137.

³⁸⁹ McCarthy, Moyer, and Venable, Deterring Russia in the Gray Zone, xvii.

Since the annexation of Crimea in 2014, the United States and NATO have enforced diplomatic punitive measures against Russia by expelling almost all Russian diplomats from U.S. and NATO diplomatic positions, suspending cooperation, and indicting suspected Russian spies and agents. Diplomacy as a punitive measure shows U.S. resolve to its red lines, without the risk of escalating the conflict, making it an ideal first step in punitive measures. However, as Cordesman reminds us, "The one thing the U.S. cannot do is use diplomacy as a substitute for countermeasures." Diplomacy as a punishment often must be used in conjunction with other forms of state power to affect Putin's cost–benefit analysis.

Punishment for gray zone aggression in the information realm looks a lot like deterrence by denial in the information space. The key factor is detecting, denying, and publicizing the disinformation to the international community and targeted audience. The one difference in the punishment strategy is that the United States can also use offensive information operations to target and expose Russian vulnerabilities as well as inform the Russian population of its government's nefarious behavior. By funding and supporting sections of the U.S. government already established to conduct these operations, in cooperation with private industry, the U.S. could begin work immediately and expand as needed. The U.S. State Department has the legal authority and capacity to conduct propaganda at home and abroad, and the CIA, through covert action, has the authority to conduct propaganda in support of overt U.S. policy goals.³⁹¹ In support of U.S. deterrent strategy, Washington can deliver a clear and concise message of U.S. red lines and resolve by setting boundaries, denouncing any Russian actions that fall outside those boundaries, and conducting retaliatory information operations that will serve as both immediate punishment and as credibility enhancement for future deterrence.

Just as diplomacy and information operations need to be nested within a larger strategy of deterrence by punishment, so does the military. As Roberts explains, "It should

³⁹⁰ Cordesman, interview with author, November 7, 2019.

³⁹¹ Smith-Mundt Modernization Act, H. Res. 5736, 112th Cong. (2012), https://www.congress.gov/bill/112th-congress/house-bill/5736/text.

be possible to significantly influence the adversary risk calculus to [the U.S.] advantage. But it requires the ability to coordinate U.S. and allied military actions in all of the operational domains and all of the dimensions of combat."392 Scholars from the Strategic Studies Institute suggest that the United States and NATO should improve their warfighting capabilities in Europe.³⁹³ They also claim that the "U.S. military hegemony and the threat of U.S. military action remain powerful tools in the international arena. The United States must continue to leverage its superior military capability in combination with the other instruments of national power to deter Russia in the gray zone while avoiding escalation into major conflict."394 Recent actions such as the formation of NATO's VJTF and military forces stationed in the Baltics and U.S.-NATO military exercises give credibility to U.S. and NATO resolve to enforce their deterrent threats against higher-level gray zone actions. Military forces at the sub-conventional level serve as a punitive threat but also as a deterrence-by-denial asset. Physical forces are capable of physical punishment; however, they also balance the asymmetry of stakes in areas closer to Russia's near abroad by signaling U.S. and NATO's commitment to the region and acting as a trip wire for physical incursion.

Ultimately, the threat of punitive use of military forces in response to sub-conventional Russian aggression carries an inherent risk of escalation. Avoiding that risk is an understandable objective of U.S. and NATO policy, as conveyed in the quotation above. But, as the discussion of the stability–instability paradox in Chapter II showed, overt reluctance to escalate undercuts the potency of the threat of military punishment to deter Russian gray zone aggression. For the United States, leveraging "its superior military capability . . . while avoiding escalation" is, therefore, a tricky proposition entailing inevitable tradeoffs. ³⁹⁵ Effective deterrence requires skill and precision in matching specific punishment threats to specific Russian objectives and requires accepting a certain measure of risk of military conflict in the event of deterrence failure.

³⁹² Roberts," It's Time to Jettison Nuclear Posture Reviews," 34

³⁹³ McCarthy, Moyer, and Venable, *Deterring Russia in the Gray Zone*, xix.

³⁹⁴ McCarthy, Moyer, and Venable, xix.

³⁹⁵ McCarthy, Moyer, and Venable, xix.

Economic punishment, in the form of sanctions, is one of the most frequently used forms of punishment by the United States. Authors from the Strategic Studies Institute claim, "The United States must explore the full gamut of economic options to target Russia's wealth and prosperity." ³⁹⁶ This means that Washington must expand its economic punishment efforts beyond sanctions. The consensus among the subject matter experts is that although U.S. sanctions against Russia have a nominal effect, they are also potentially detrimental to deterrence. ³⁹⁷ If Russia views the sanctions as broad and unyielding, even if they do comply with U.S. demands, then there is no prospect of the sanctions eliciting improved behavior because there is no perceived security assurance. Most of the sanctions on Russia were enacted after the annexation of Crimea and are specifically tied to Russian actions. However, according Mazarr, Russia might not perceive it that way and could see the sanctions as just another tactic of containment. ³⁹⁸ For sanctions to be an effective tool in affecting Russia's decision calculus, the United States must re-establish communication and diplomacy to tie that punishment to its assurances.

Another approach toward sanctions comes in the form of punitive diplomacy. Participants of the MCDC suggest that the United States could pursue diplomatic measures much like the Magnitsky Act, which was "put to the table in the bilateral presidential meeting in Helsinki in July 2018." The Magnitsky Act, passed in 2012 and expanded in 2016 to the Global Magnitsky Act, "allows the [U.S.] executive branch to impose visa bans and targeted sanctions on individuals anywhere in the world responsible for committing human rights violations or acts of significant corruption." The act, which originally targeted Russia, demonstrates the U.S. and international communities' commitment to protecting human rights through economic and diplomatic punishment. The act bolsters deterrence by changing the calculus of foreign officials, requiring them to consider U.S.

³⁹⁶ McCarthy, Moyer, and Venable, xx.

³⁹⁷ See Appendix A.

³⁹⁸ Mazarr, interview with author, December 17, 2019.

³⁹⁹ Multinational Capability Development Campaign, "Deterrence by Punishment," 3.

⁴⁰⁰ "The U.S. Global Magnitsky Act," Human Rights Watch, September 13, 2017, https://www.hrw.org/news/2017/09/13/us-global-magnitsky-act#.

repercussions for their corrupt actions. As Human Rights Watch explains, the act "also provides incentives to foreign governments to improve their own accountability mechanisms," which contribute to the deterrence of the actions through international public disapproval and political backlash that runs counter to Russia's ends.⁴⁰¹

Other options for economic punishment include exploiting Russia's own weak economic system. Pifer maintains,

The stagnation of the Russian economy is in part self-inflicted. To open the economy in ways that would increase growth would require that the state release some of the control over its economy. The 'crony capitalism' model that President Putin has developed is connected to his authoritarian leadership, which traps him, leading to the continual stagnation of Russia's economy. 402

One approach to exploiting this weak system is to isolate Russia economically. Cordesman suggests that Washington pursue changes that reduce or discontinue aid to any state that partners with or aids Moscow in its nefarious behavior or increase aid to states whose objectives run counter to Russia's. 403 Because of Russia's stagnated economic growth, corruption, and closed economic system, it is vulnerable to isolation.

In multiple interviews, participants recommended a U.S. information operations strategy to affect Russia's decision calculus by exposing, or threatening to expose, the corruption within Putin's own circle of political elites. Lute states, "To deter gray zone actions, you have to identify what Putin values and hold it at risk, so that the pain or political consequences that the U.S. is threatening get his attention." ⁴⁰⁴ Lute suggests that signaling to Putin Washington's willingness to expose his finances or those of his political elites to his economically deprived population, which would be detrimental to his political hold on power, could serve as a deterrent measure. ⁴⁰⁵

⁴⁰¹ Human Rights Watch.

⁴⁰² Pifer, interview with author, October 25, 2019.

⁴⁰³ Cordesman, interview with author, November 7, 2019.

⁴⁰⁴ Lute, interview with author, November 26, 2019.

⁴⁰⁵ Lute, interview with author.

It is speculated that President Putin utilizes his finances and close relationships with Russian oligarchs to stay in power, and any signal from the United States that it is willing to disrupt that system could have significant weight as a deterrent threat. 406 Pifer agrees, but he suggests that exposing the corruption of Russian oligarchs closest to Putin rather than Putin himself would signal to the president a U.S. deterrent threat. 407 Exposing corruption in the Kremlin could be done in a covert action, giving the U.S. plausible deniability and reducing the risk of escalation. However, it is worth noting that although such a strategy could be effective, it could also be provocative. Exposing details of corruption in top Russian leadership could affect Putin's ability to remain in power and be perceived as an existential threat.

C. CONVENTIONAL ESCALATION TO RESTORE DETERRENCE

Any given instance in which violence in the gray zone rises and little green men or armed mercenaries are introduced by Russia decreases ambiguity but increases the likelihood of armed conflict. When Russian aggression breaches the gray zone and enters into armed conflict, it is necessary for the United States to escalate to conventional-level strategies both to defend threatened interests directly and to restore deterrence at the subconventional level.

The United States demonstrated this strategy in February 2014 when Russian mercenaries from the Wagner Group along with Syrian soldiers attacked a U.S. position in Syria. Russian leadership denied any involvement, and U.S. armed forces responded to the attack with an air strike killing approximately 500 pro-Syrian fighters including Russian mercenaries. 408 Through military punishment at the conventional level, the United States

⁴⁰⁶ David Szakonyi, "Why Russian Oligarchs Remain Loyal to Putin," *Moscow Times*, December 1, 2017, https://www.themoscowtimes.com/2017/12/01/centrifugal-forces-why-russian-oligarchs-remain-loyal-to-the-putin-government-op-ed-a59760; Gwynn Guilford, "The Mystery of Russia's Missing Wealth Shows How Putin Retains His Power," Quartz, July 22, 2018, https://qz.com/1330955/russias-missing-wealth/; Filip Novokmet, Thomas Piketty, and Gabriel Zucman, "From Soviets to Oligarchs: Inequality and Property in Russia 1905–2016," Working Paper 2017/09 (Paris: World Inequality Lab, April 2018), https://wid.world/document/soviets-oligarchs-inequality-property-russia-1905-2016/.

⁴⁰⁷ Pifer, interview with author, October 25, 2019.

⁴⁰⁸ Gibbons-Neff, "Battle between Russian Mercenaries and U.S. Commandos."

clearly signaled to Russia that it had crossed a red line that the United States was not willing to tolerate. The conventional strike re-established the conflict boundaries by showing Russia that the United States is willing to escalate to conventional conflict, a level at which Russia does not want to operate. Russia may have expected that by maintaining ambiguity in its actions through the use of mercenaries instead of armed Russian forces, the United States would not respond with conventional force. In thwarting those expectations, the United States changed Russia's decision calculus and constrained the bounds of the gray zone to the sub-conventional level below armed conflict. Panetta explains, "In today's environment, the constraints of the treaties that were developed between the U.S. and Russia in the Cold War are no longer there. Russia is doing everything it can to test the waters and develop superiority where they can, and the U.S. must make it clear to Russia what it will not tolerate." 409

In summary, deterrence in the gray zone is possible but not perfect. The United States can effectively deter some but not all of Russia's gray zone actions. Washington must understand that deterrence in the gray zone cannot be accomplished using a zerotolerance standard, which entails choosing what to deter at the sub-conventional level and what it is willing to accept. A successful deterrent strategy will require a whole-ofgovernment approach in conjunction with private-sector partnerships. Success is predicated on cooperation with U.S. allies, the re-establishment of communication with Russia, and diplomacy. The application of the strategy will center on deterrence by denial, supported by punishment when denial fails due to the low cost of action at the subconventional level. Finally, sub-conventional deterrence can be re-established through the escalation and the use of conventional forces; however, such escalation is not without risk and must be done in a calculated, proportional way. The advantage of layering a deterrenceby-denial strategy with all aspects of deterrence by punishment is that much like cumulative deterrence, over time, it bolsters the credibility of the United States and alters Russia's decision calculus at the sub-conventional level, thereby strengthening deterrence overall and bounding the conflict to the gray zone.

⁴⁰⁹ Panetta, interview with author, December 16, 2019.

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V. CONCLUSION

The gray zone needs to be a priority for the U.S. and NATO.

—Leon Panetta⁴¹⁰

Elisabeth Braw states, "It is no secret that what is now urgently needed is a new form of deterrence, one that will make perpetrators of disinformation, cyber-attacks and other non-kinetic forms of aggression reconsider the benefits of attacking." The interviews of subject matter experts combined with current literature have given this thesis the advantage of gathering the most current, consolidated, and tailored data to answer the question of how the United States can deter Russian gray zone conflict. This thesis discovered that it is possible, albeit difficult, to deter Russian gray zone aggression at the sub-conventional level. Specifically, this thesis has shown that deterrence at the sub-conventional is made possible through a shift in the deterrence mindset, coupled with the re-establishment of fundamental deterrence basics, and partnership with private industry and U.S. allies.

Ultimately, the layering analysis in each chapter of this thesis forms a holistic view of how the United States can deter Russian gray zone conflict. The analysis integrated a detailed understanding of Russia as a state actor, the U.S.–Russian relationship, the gray zone in context with Russia's use, deterrence theory from the strategic to sub-conventional level, and finally, a recommended deterrence strategy. Although this thesis provides a recommended deterrent strategy, it recognizes that any deterrent strategy should nest within a broader strategic national security effort toward Russia. To that end, any deterrent strategy presented in this research needs to be analyzed in context with the most current geopolitical environment and national security objectives before implementation.

⁴¹⁰ Panetta, interview with author, December 16, 2019.

⁴¹¹ Braw, "From Schools to Total Defence Exercises," 1.

A. SIGNIFICANT FINDINGS

Chapter I provided the background necessary to understand the security environment and current landscape in which this thesis was situated. Chapter I also established a clear and bounded definition of the gray zone by synthesizing the interviews of subject matter experts and the existing literature. This research defined the gray zone as follows:

Any actions above the level of normal statecraft that remain below the threshold of state-sponsored armed conflict, focus on gaining strategic leverage, and are characterized by ambiguity, intense political, economic, and informational competition that could involve aggression, the use of ambiguous force, or the incitement of violence.

This definition was significant as it clarified what is and, more importantly, what is not considered gray zone conflict. This research found a previous gap in the literature concerning an agreed-upon definition by the national security community, yielding a tendency not to bound the scope of gray zone activities to a point that effective policy or strategy could be applied.

Chapter II provided an extensive strategic assessment of Russia as a state actor, a holistic view of the relationship between the United States and Russia, an explanation of the sources of Russian antagonism, and an exploration of Russia's gray zone use. Chapter II assessed that Russia is an opportunistic revisionist state in slow decline, with distrust and antagonism toward the West. This antagonism stems from multiple sources but Russia most prominently blames it on the expansion of NATO. Russia is risk-averse to open conflict with the United States and NATO because it understands that outside of the initial period of war (three weeks) or outside its near abroad, it will lose a conventional conflict. However, Russia is risk-acceptant at lower levels of conflict, such as actions in the gray zone, if it forwards Russian national objectives and so long as the prospect of triggering outright conventional conflict is minimal. Russia's use of the gray zone is the strategy of a weaker nation with limited economic potential—and few options to forward its objectives. However, Russia is efficient and effective at these tactics and is advanced beyond the United States in its use of the information domain. Lastly, Russia's main strategic objectives include the protection of the regime and state, gaining geopolitical

dominance of its region, renegotiating the European security architecture to include gaining recognition as a great power, and weakening the cohesion of the NATO alliance to diminish U.S. involvement and gain leverage in Europe. Understanding Russia's emphases and priorities among these objectives is key to successful gray zone deterrence.

Chapter III assessed deterrence strategies from classic deterrence at the strategic level, to conventional deterrence, to cumulative deterrence, and the chapter analyzes the potential for each deterrence form to be transposed or adapted to the sub-conventional level. Chapter III also examined the stability—instability paradox and its application to the relationship between the conventional and sub-conventional levels in the specific deterrence dynamics between the United States and Russia. Chapter III found that in additional to the familiar sources of strategic nuclear stability, Russia's desire to avoid open conflict with the United States and NATO—combined with NATO's clearly signaled reticence to risk conventional conflict despite a superior position—strengthens the stability relationship at the conventional level. This stability foments instability at the sub-conventional level, giving rise to the use of gray zone tactics by a conventionally weaker Russia. This finding bears particularly on the deterrence strategy recommended in Chapter IV as it considers the adversarial view of warfare.

Chapter III also proved that some parts of different deterrence strategies—below classic strategic deterrence—can be effectively used at the sub-conventional level. However, all strategies need adaptation and are shaped by the stability in the U.S.—Russian relationship that strategic nuclear weapons provide. The application of these approaches at the sub-conventional level, however, requires a shift in the U.S. policymaker's mindset, from zero tolerance of failure to a "cumulative deterrence" notion—that occasional low-level deterrence failure provides an opportunity for response, which in turn enhances the ability to more easily deter similar threats in the future. As discussed in Chapter III, cumulative deterrence aims to impose general expectations for adversarial restraint—expectations that are strengthened by appropriate responses to specific adversarial breaches. Chapter III shows that by adapting portions of a conventional deterrence strategy and layering it with cumulative deterrence the U.S. can sustain credibility across multiple encounters even if deterrence fails in certain instances, vis-à-vis classic zero-tolerance

nuclear deterrence. Over time, U.S. responses to Russian gray zone aggression could moderate Russian behavior, causing a shift in Russia's decision calculus and strategic goals, thereby bounding or diminishing the conflict.

Ultimately, Chapter III showed that the waning deterrence credibility and capability, as highlighted in Russian rhetoric and academic literature, are not as dire as this adversary wants to project. The U.S. deterrence posture is stable in its current state at the nuclear and conventional levels. It is also bolstered by recent U.S. capability developments and NATO efforts to strengthen its conventional capabilities and posture, such as through the VJTF. However, the U.S. deterrent strategy at the sub-conventional level is lacking and requires immediate attention if the United States wishes to compete in the gray zone.

Chapter IV detailed the components of a successful deterrent strategy against Russian gray zone conflict based on the assessments of the previous chapters. This strategy included diplomacy through established architecture and common interest, communication at the strategic and working level, and a shift in the deterrent mindset. This thesis has revealed that a strategy of deterrence by denial, supported by punitive action when denial fails at the sub-conventional level, has the highest chance of success against deterring Russian strategic ends pursued through gray zone tactics.

In particular, this research has demonstrated that to avoid executing a purely reactionary strategy, it is crucial for the United States to focus on deterring Russia's strategic end goals versus deterring the ways and means that Russia uses to achieve those goals. To do this, the United States must prioritize what it wishes to deter in the gray zone and focus punitive efforts on those activities. Examples of Russian activities that could be objects of gray zone deterrence include interference in democratic processes of the United States and its allies, the use of chemical weapons for assassination, violations of state sovereignty, and cyberattacks that cause physical damage or interference in global trade and economics.

The necessary components of a successful strategy include the re-establishment of communication and diplomacy with Russia, a shift in the deterrent mindset away from zero tolerance of failure, and a commitment to deterrence by denial. Deterrence by denial can

be achieved through measures such as reinvigorating alliances, strengthening ally capacity, fostering collaboration between the U.S. government and the private sector, developing societal and infrastructure resilience, and reforming U.S. information operations. It is imperative for the United States to understand that a deterrent strategy against gray zone conflict is a whole-of-government approach in combination with allies and private industry partners; it will be a long-term solution that requires a shift in the mindset of the public and government leaders.

Finally, Chapter IV demonstrated that sub-conventional deterrence will sometimes require punitive actions across the full spectrum of U.S. state power in every category of DIME when high-priority deterrence fails. Deterrence can be re-established through selective escalation to the use of conventional force, as exemplified by the 2018 U.S. military airstrike in Syria against pro-Syrian troops and Russian mercenaries after an attack on an American outpost in which Russia denied involvement. Selective use of conventional force helps re-establish deterrence in two ways: by signaling the credibility of threats to use such force in response to certain actions and by diminishing the stability–instability paradox by which Russian confidence in U.S. and NATO reticence to use force fuels sub-conventional adventurism.

Not all actions in the gray zone can or should be deterred. Russia's authoritarian regime and opportunistic approach give Russia the ability to quickly execute gray zone tactics before the United States can gather intelligence on the action, emplace a deterrent posture, or mobilize counteraction. In some cases, the United States may choose not to deter a gray zone action because the cost of deterrence resources is not worth the benefit of deterring the action. But not seeking or not achieving deterrence in harder situations will not undermine a cumulative gray zone deterrence posture supported by whole-of-government denial capabilities and selective punitive responses to Russian actions against high-priority interests.

⁴¹² Gibbons-Neff, "Battle between Russian Mercenaries and U.S. Commandos."

B. POLICY IMPLICATIONS

Policy implications based on the findings of this research center around assessing strategic priorities, allocating resources, and improving alliance relationships. To successfully implement the deterrence strategy detailed in Chapter IV, the United States must decide whether deterring Russian gray zone aggression is a strategic priority and, if so, what specific gray zone actions it wishes to deter. To effectively implement a deterrence policy, the United States must first decide that the gray zone is a strategic priority and signal that to its adversaries. Successful deterrence depends on a credible threat derived from strategic interest, as well as credible denial capabilities. To make the deterrent threat to adversaries at the sub-conventional level credible, Washington must show its interest and commitment to deterring that level of warfare.

If the United States decides that deterring sub-conventional conflict is a strategic priority and signals that to its adversaries, it must allocate the resources and personnel to do so. As detailed in Chapter IV, a deterrence-by-denial strategy supported by deterrence by punishment is recommended to deter Russian gray zone aggression. This strategy is a long-term solution that requires a whole-of-government approach, population resilience and contribution, and partnership with private industry and allied states. The strategy utilizes every instrument of state power and, as such, will require considerable resources, time, and dedicated effort to implement it. Public policies of civic and military education, government–civilian collaboration, infrastructure reform, and societal healing and resilience need bipartisan support and robust funding on a long-term basis to succeed.

Additionally, the United States must decide which gray zone actions it wishes to deter and allocate the resources to do so. Many actions in the gray zone come at little cost and low risk, which make it difficult to deter an adversary from utilizing the strategy completely. This inability to completely deter gray zone actions necessitates that the United States determine which actions it is not willing to accept and focus its deterrence-by-punishment efforts there. This research assesses in detail how the United States can deter Russian gray zone conflict; however, it is up to U.S. policymakers and leaders to decide whether sub-conventional deterrence is a strategic priority and allocate the resources necessary to execute the strategy.

Another necessity for a successful deterrent strategy is the strengthening of U.S. alliances. In Chapter IV, Michael Mazarr explains, "The U.S. cannot deter Russia's gray zone by itself; it needs allies and partners because, in most cases, the U.S. is not the target of the gray zone actions—our partners are. If the targets of the aggression are not on board with the deterrent strategy, then it is not sustainable." ⁴¹³ Through the strengthening and bolstering of U.S. alliances, it can further its denial capabilities, bolster its deterrent threats and credibility, extend its influence, and amplify its capacity to deny or counter Russian aggression. An effective deterrence strategy relies on the United States and its allies to operate from a cohesive position of allied strength so that Russia cannot sow discord and fracture the alliance. The increased support and cohesion of the United States and its allies fundamentally deny Russia one of its strategic ends. To ensure the strength of the NATO alliance, the United States could bolster individual alliance states through measures including increased aid, defense training, intelligence sharing, trade agreements, energy independence measures, and other policies that increase their capacity and resilience.

C. LIMITATIONS AND OBSTACLES

Limitations to this research included restricting interviews of subject matter experts to U.S. citizens, using unclassified and open-source data exclusively, adhering to the general categorization of the levels of warfare, and scoping the research to exclude the assessment of the necessary capabilities or "means" to implement a deterrent strategy at the sub-conventional level.

The subject matter experts interviewed for this thesis provided a wealth of knowledge, experience, and expertise on topics including but not limited to NATO operations, Russian decision-making, and foreign perspectives, which ensured that the research was well rounded and complete. However, the limited time in which this thesis was produced prohibited the use of foreign nationals as interview subjects. The process for approval would have exceeded the length of time available for research, thus restricting the scope to interviews only with U.S. citizens.

⁴¹³ Mazarr, interview with author, December 17, 2019.

This thesis utilized only unclassified and open-source information, including the interviews, as the dataset for the research to ensure that the results were available to the broadest audience possible and that the research had an opportunity to promote positive change in the national security space. The addition of classified information might alter the perspective of how Russia would perceive the proposed deterrent strategy and change the assumptions of escalation control that this thesis utilized.

This research necessitated the use of the general categorization of the levels of warfare as well as weapons and theories that exist at those levels. This thesis utilized the categories of the strategic level with nuclear weapons, conventional level with conventional-type weapons, and sub-conventional level with gray zone tactics and weapons below armed attack. This categorization was necessary for the analysis of deterrence theory within these categories and the ability to transpose or adapt each approach to the sub-conventional level. However, in practice, more nuanced levels and cross-cutting exceptions to these general categories exist. For example, tactical or low-yield nuclear weapons seen as offensive or "usable" fall somewhere between the strategic level, which is regulated by the norm of non-use, and the conventional level. Similarly, information warfare and cyberattacks might by scale and effect, even absent human violence or physical destruction, rise to the level of strategic or existential impact. These kinds of capabilities complicate the development of a posture for non-escalatory deterrence of gray zone provocations.

Lastly, this research was scoped to exclude an analysis of the capabilities and weapons systems needed to implement the proposed deterrent strategy at the sub-conventional level. The ends and ways of the deterrent strategy were assessed and described; however, the specific means necessary require further research. For example, the thesis identified that the United States must increase resilience and security in its democratic systems and infrastructure, but it did not list the specific type of cyber or military capabilities that will be necessary to ensure their proper resilience and defense.

D. OPPORTUNITIES FOR FUTURE RESEARCH

An identified gap in this research is the lack of foreign national interviews. As this research has shown, a U.S. deterrent strategy against Russia's gray zone conflict cannot be executed in a unilateral manner; it requires collaboration with allies and partners, including the EU and NATO. Further research from the perspective of NATO in pursuing deterrence of the sub-conventional level would greatly complement this thesis. Suggested research would include interviews of subject matter experts from NATO, the EU, and U.S. partner nations' personnel, from all sources including academia, government, military, private industry leaders, and citizens. A comparison of the results from this thesis and the proposed research could overlap to provide a complete alliance view of deterrence that would underscore alliance-based requirements to deploy a coherent and fully supported deterrent strategy.

This thesis and its recommendations assume that escalation control is feasible, particularly in certain situations of selective U.S. and NATO conventional force response. There is an opportunity for further research that explores how sub-conventional deterrence would function in the event of an adversary or U.S. and NATO miscalculation or misperception, causing conflict to escalate out of the gray zone. Escalation out of the gray zone could be intentional or unintentional as future gray zone actions at the subconventional level could have strategic effects. Examples include Russian information warfare or a cyber campaign that is not intended to but results in physical damage or loss of life. How would the United States and NATO treat such an attack? Would the United States and NATO consider a non-conventional attack as an act of war if the results were grave or strategic enough? Specifics such as the level, quantity, and type of conventional force necessary to restore deterrence and control escalation could be explored. Additionally, further research into escalation control at the sub-conventional level beyond the U.S.-Russian relationship is warranted to support an overarching theoretical understanding of sub-conventional deterrence that would greatly enhance the U.S. ability to execute a successful sub-conventional deterrence strategy vis-à-vis Russia as well as in other contexts.

This thesis recognizes that the deterrence of Russia's gray zone cannot be done in a unilateral fashion and has focused on deterrence from the U.S. perspective while keeping the needs and concerns of its allies and partners in mind. This research has shown that many of Russia's gray zone tactics are directed at NATO alliance members to sow discord in the alliance and arrest U.S. influence. Chapter IV explained that to implement a successful deterrent strategy, the United States must strengthen its alliances and bolster NATO's member states. This finding and recommendation assumes that a deterrence strategy in an alliance such as NATO can be agreed upon and executed effectively. Future research into the dynamics of deterrence among alliances at the sub-conventional and conventional level would amplify the ability of the United States, or any state in an alliance, to more effectively develop and implement a deterrent strategy such as the one recommended in this thesis. An example of alliance case studies for future research include the U.S.-South Korean alliance and the NATO alliance. Future research could include how states coordinate policy with an ally that depends heavily on deterrence and how that dependence affects alliance politics. Additionally, a ripe opportunity exists for future research in lessons learned from case studies. One example includes the 1980 deployment of Pershing and cruise missiles as a form of extended deterrence in the context of public outcry.

This thesis categorized deterrence theory into four levels or concepts, including classic deterrence at the strategic nuclear level, conventional deterrence, cumulative deterrence, and sub-conventional deterrence, specifically in relation to the gray zone. However, the levels of warfare or execution of strategy are not always as clear cut. Space exists between the strategic nuclear level and the conventional level for tactical nuclear weapons considered offensive weapons that are potentially "usable" in a conflict vis-à-vis strategic nuclear weapons seen as defensive that fall within the norm of non-use. In light of this chasm, scholarly assessments based on Russian doctrine have stated that "Russian escalation is sometimes envisioned as a tactical strike on NATO conventional forces in the

Baltic states or a demonstration strike that results in few or no direct casualties."⁴¹⁴ Moreover, "Russia might even employ a demonstration strike early in a Baltic conflict, before it begins suffering conventional reverses, to intimidate NATO governments and consolidate its gains."⁴¹⁵ By threatening the use of tactical nuclear weapons at the outset of a conflict, Russia could be attempting to subvert conventional conflict with NATO and nullify NATO's conventional force strength.

Given this prospect of early Russian tactical nuclear weapons use, it would be prudent for future research to explore how tactical or low-yield nuclear weapons interact with sub-conventional deterrence and escalation management. Research would examine how the zero tolerance for failure associated with strategic nuclear weapons may or may not shift when considering tactical or low-yield nuclear weapons. The results of the research could be applied to analyze whether this category of weapon requires a different strategy of deterrence when viewed in the context of sub-conventional escalation or limited use. An example would be if Russia utilizes a tactical nuclear weapon as an area-denial mechanism after a conflict has escalated out of the gray zone. Arbatov et al. point to entanglement and doctrinal developments by Russia and the United States as "giving rise to the risk that a non-nuclear conflict—even a local one—might escalate rapidly and unintentionally into a global nuclear war."416 Further research to address these issues could help answer some of the following questions: Do the "tactical" or "low-yield" characteristics of these nuclear weapons erode the norm of non-use associated with strategic nuclear weapons? If so, how does that affect sub-conventional deterrence and escalation management strategies at the sub-conventional level?

This thesis provided a thorough assessment of sub-conventional deterrence in the context of the U.S.-Russian relationship. Future research could consider other specific contexts or case studies. Research that applies and analyzes the findings of this thesis to

⁴¹⁴ Paul K. Davis et al., *Exploring the Role Nuclear Weapons Could Play in Deterring Russian Threats to the Baltic States* (Santa Monica, CA: RAND Corporation, 2019), 46, https://www.rand.org/content/dam/rand/pubs/research_reports/RR2700/RR2781/RAND_RR2781.pdf.

⁴¹⁵ Davis et al., 46.

⁴¹⁶ Arbatov et al. *Entanglement*, 1.

use of the gray zone by other states, such as China, would be of great value to the U.S. national security community. China utilizes the gray zone very differently from Russia. Examining the deterrent strategy applied to the same level of warfare but with different strategic ends, means, and ways would provide an assessment of how the utility of the strategy depends on how it is tailored to particular adversaries. Suggested research questions include the following: How much adaptation and tailoring is required to transpose the strategy to other great power adversaries? What components of the strategy are portable, and what elements are too specific to Russia to be applicable to other adversaries? In what ways does stability at the conventional level in the relationship affect the success of the sub-conventional deterrence strategy?

This thesis provides a thorough analysis of the concepts considered; however future research at the classified level could compliment the analysis and findings of this research. Classified information could provide additional communication avenues, diplomatic measures, and options for deterrence by denial and deterrence by punishment that the United States could exercise through covert or clandestine actions or programs. Additionally, future research at the classified level could provide policy makers with additional options for deterrence by punishment through other forms of state power including covert actions, clandestine operations, or military special forces. Other research could include the role military special forces and covert action play in deterring or countering gray zone provocations, not just from Russia but from other adversaries as well. This research could provide policymakers and government leaders with denial or punishment options that support overt U.S. policy and strengthen the overall deterrent posture at the sub-conventional level.

The 2017 *National Security Strategy* states that "deterrence today is significantly more complex to achieve than during the Cold War."⁴¹⁷ It goes on to explain,

Adversaries and competitors became adept at operating below the threshold of open military conflict and at the edges of international law. Repressive, closed states and organizations, although brittle in many ways, are often more agile and faster at integrating economic, military, and especially

⁴¹⁷ Trump, National Security Strategy, 27.

informational means to achieve their goals . . . making it harder for the United States and our allies to respond. 418

The *National Security Strategy* calls for the United States to prepare for these types of conflicts and recognize that it is in a state of continual competition in today's strategic environment. It is time for the United States and its allies to reinvigorate their efforts and capabilities to compete and operate at the sub-conventional level utilizing all elements of state power. From military innovation to societal and policy transformation, history has shown that the United States can meet the challenges of new environments by adapting and relying on its values and strength through the alliance system. The challenge of gray zone aggression in this renewed environment of great power competition is simply another opportunity for the United States to innovate and gain strength in partnership with its allies. This thesis provides a road map for how to do that successfully in the context of deterring Russian gray zone conflict and should be considered with the utmost care when developing and implementing policy in the future.

⁴¹⁸ Trump, 27–8.

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APPENDIX A. INTERVIEWEES

Name	Title	Organization	Interview Date	Consent to be Identified
Dr. Brad Roberts	Director at the Center for Global Security Research, former deputy assistant secretary of defense for nuclear and missile defense policy	Lawrence Livermore National Laboratory	18-Oct-19	Yes
Michael Kofman	Director of the Russia Studies Program	CNA Analysis and Solutions	23-Oct-19	Yes
Steven Pifer	Nonresident senior fellow in the Arms Control and Non- Proliferation Initiative and the Center on the United States and Europe	Brookings Institution	25-Oct-19	Yes
David Petraeus	Retired United States Army general, former director of the Central Intelligence Agency	KKR Global Institute	31-Oct-19	Yes
Anthony Cordesman	Arleigh A. Burke chair in strategy	CSIS	7-Nov-19	Yes
Dr. Michael Mazarr	Senior political scientist, former senior defense aide on Capitol Hill and special assistant to the chairman of the Joint Chiefs of Staff	RAND Corporation	17-Dec-19	Yes
Dr. David Holloway	Senior fellow emeritus, faculty member at the Center for International Security and Cooperation; affiliated faculty at the Center on Democracy, Development, and the Rule of Law; affiliated faculty at the Europe Center	Stanford University Freeman Spogli Institute of International Studies	14-Nov-19	Yes
Douglas Lute	Retired United States Army lieutenant general, senior fellow for the Project on Europe and the Transatlantic Relationship, and former United States permanent representative to the North Atlantic Council for NATO	Harvard University Belfer Center for Science and International Affairs	26-Nov-19	Yes
Leon Panetta	Former secretary of defense, former White House chief of staff, and former director of the Central Intelligence Agency	Panetta Institute for Public Policy	16-Dec-19	Yes

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APPENDIX B. INTERVIEW QUESTIONS

- 1. What is your definition of Russian grey zone conflict?
 - a. What is included?
 - b. What is not included?
 - c. Please provide examples.
 - d. Please explain.
- 2. Russia recognizes that multiple levels of conflict exist before reaching a threshold beyond which they are outmatched politically and militarily by the United States and NATO.
 - a. Where do you believe that threshold is?
 - b. Does it move? Based on what? When?
 - i. Is there a general guideline of this threshold that policy makers/warfighters can plan from?
 - c. How and when are they outmatched?
- 3. Based on the Gerasimov doctrine where would you place grey zone activity on the spectrum of conflict?
 - a. How do you feel that grey zone activity nests into the doctrine? Does it?
 - b. What Russian strategies on the chart are included?
 - i. See Chart.
- 4. The consensus is growing that Russian strategic objectives include weakening the cohesion of the NATO alliance to diminish United States involvement and gain leverage in Europe.
 - a. Do you agree?
 - b. Do you believe there are other Russian strategic objectives that the United States should be concerned about?
 - i. What are they? Please explain.

- 5. Do you believe that the United States and Russia are currently in conflict?
 - a. Please explain.
- 6. Based on your answer to number four, do you believe that the United States can deter Russian grey zone activity in this context?
 - a. Why or why not?
 - b. How?
 - c. Please explain.
- 7. The United States and NATO have long held strategic and extended deterrence as an enduring national and treaty objective. Do you believe that Russia's grey zone activity is undermining or diminishing the effectiveness of U.S. extended deterrence?
 - a. How?
 - b. Why?
 - c. Where?
 - d. Please explain.
- 8. Do you believe that the U.S. does enough to inject information operations into its strategy to deter Russian grey zone conflict?
 - a. Why or why not?
 - b. Please explain.
 - c. If you answered no to number three, do you think the increase of information operations will bolster the deterrence of Russian grey zone conflict.
- 9. Based on your expertise, what is the United States' best strategy for deterring Russian grey zone conflict?
 - a. Why?
- 10. Based on your expertise, what is the worst strategy that the United States could employ to deter Russian grey zone conflict?
 - a. Why?
 - b. How would this strategy weaken or worsen deterrence?
 - c. How would it affect deterrence and extended deterrence elsewhere?

- 11. Do you believe that the recent changes made to the NATO force structure and policy in the Baltic region are sufficient to deter Russian grey zone activity?
 - a. Why or why not?
- 12. Do you believe that the U.S. and or NATO could have deterred Russia's annexation of Crimea if a different strategy or posture was pursued prior?
 - a. How and why?
- 13. Do you believe that an increased U.S. presence in a region will deter Russian grey zone activity?
 - a. Why or why not?
- 14. Do you believe that the deterrence of Russian grey zone activity can be achieved by the United States alone?
 - a. Why or why not?
 - b. OR do you believe it must be achieved through the system of alliance and partners?
 - i. Why or why not?
 - ii. How would that strategy look?
 - iii. What would be the U.S. role in a cooperative security strategy?
 - iv. What would be the alliance/partner role in the strategy?
 - v. What would be the NATO role in the strategy?
- 15. Do you believe that the increased presence of host nation forces and defenses will deter Russian grey zone activity in an area without U.S. forces or NATO allies?
 - a. Why or why not?
 - b. Please explain.
- 16. Considering that Russia aims to avoid direct conflict with the U.S./NATO, do you believe that they view grey zone activity as a separate strategy disconnected from their other warfighting strategies?
 - a. How and why?
 - i. Please explain.

- b. Or, do you see Russia's grey zone strategy as a part of their overall warfighting strategy?
 - i. How and why?
 - ii. Please explain.
- 17. Do you believe that the U.S. should focus on deterring Russia's grey zone activity based on the assumption that it could escalate to direct conflict between the two states?
 - a. Or, do you believe that the United States should focus its deterrence efforts elsewhere based on the low threat that overall grey zone activity creates?
 - i. Please explain your answer.
- 18. What do you believe are Russia's main strategic objectives and priorities?
 - a. Do you believe that grey zone conflict can achieve these objectives alone?
 - b. Do you believe that grey zone conflict significantly contributes to Russia's obtaining those goals?
- 19. Where do you see current United States deterrence strategy against Russian grey zone activity failing?
 - a. Where do you see it succeeding?
 - b. Where do you see future issues?
 - c. Where do you see room for improvement?
- 20. Where do you see weaknesses in Russia's current grey zone strategy?
- 21. What weaknesses or vulnerabilities do you see in Russia that could be exploited or used to leverage deterrence of grey zone activities.
 - a. Please use the DIME (diplomatic, information, military, economic) framework for your answer.
- 22. Do you believe that the traditional theory of deterrence can be applied to grey zone conflict strategies?
 - a. Why or why not?
 - b. Please explain.

- 23. Multiple recurring themes have emerged from the previous interviews. What are your thoughts on these themes?
 - a. Do you agree or disagree?
 - b. Please explain.
- 24. Do you have any other thoughts or comments on this subject that were not previously asked or discussed?
 - a. Please elaborate.

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