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U.S. Strategic Competition with Russia

A RAND Research Primer

central theme of the 2017 U.S. National Security Strategy is the "growing political, economic, and military competitions" between the United States and several state adversaries, one of which is Russia.¹ Russia's early 2014 invasion and annexation of Crimea made it clear how far Moscow would go to advance its interests, including the redrawing of internationally recognized borders. U.S. competition with Russia occurs at many levels, from the military arena—and Russia's armed forces have been bolstered by large investments and ambitious reforms over the past ten years—to the economic, political, and social realms.

The RAND Corporation has conducted extensive research on how and why the United States is engaged in strategic competition with Russia. This Perspective reviews 58 RAND reports on this topic from 2015 through mid-2020. These reports do not offer a comprehensive view of competition with Russia; the military and informational aspects of the competition are overrepresented, partially because of sponsor requirements. However, the reports offer original insights on key aspects of the deteriorating U.S.-Russia relationship.



This review covers several issues pertaining to the competition, including Russia's strategic goals and priorities, the policies and measures through which Russia attempts to fulfill these goals, how Russia's actions affect U.S. strategic interests, how effective U.S. responses have been, and which additional steps might further protect U.S. interests. The review also includes studies that take a broader view of what is at stake in this competitive international environment and how competition with Russia might differ from competition with other adversaries—particularly China. This review excludes tactical-level studies that offer detailed comparisons of U.S. and Russian military capabilities or examine the value of specific assets or systems under certain warfighting conditions.

This review first highlights major findings across the RAND studies, then discusses key themes that RAND researchers have found particularly relevant in the context of U.S.-Russia strategic competition. A concluding section outlines topics for additional research that could further inform the work of strategy and policy development.

Major Findings

Using various methodological approaches and theoretical perspectives, the RAND studies have coalesced around a set of nine relatively consistent findings:

- 1. The U.S.-Russia strategic competition will likely be long-lasting.
- 2. States "in between" Russia and member states of the North Atlantic Treaty Organization (NATO) are at the center of this competition.

- 3. Conventional war between the United States and Russia is unlikely (but the United States should nonetheless prepare for it).
- 4. Russian hostile actions below the threshold of war are expected to continue.
- 5. Russia's achievements in this competition are limited so far.
- 6. The United States has the lead but could diminish its advantage by implementing the wrong policies.
- 7. Engagement remains possible—and desirable—with Russia.
- 8. The United States can help its allies and partners address gray zone threats.
- 9. These same allies and partners play key roles in helping the United States prevail.

Competition Is Here to Stay

Several studies gauged the expected duration of the competition between the United States and Russia. Is this competition more like a sprint, in which victory can be quickly achieved, or is it more like a marathon? The research clearly points toward the latter. Neither side appears particularly keen on working toward a new détente. As Samuel Charap, Jeremy Shapiro, and Alyssa Demus put it in 2018, "Overall, both sides distrust each other fundamentally, view each other as attempting to interfere in each other's domestic politics, and think the other is inherently aggressive and expansionary." Russia is likely to remain a U.S. rival until at least 2030 because of its desire to change the U.S.-dominated international order, its insistence on maintaining influence over its neighborhood, and its military buildup.³

This mistrust appears particularly strong on the Russian side, with research showing that "many Russian policymakers appear to believe that the prospects for a stable, long-term accommodation with NATO are limited."4 The mistrust predates the tensions borne out of the Ukraine crisis; it is rooted in a perception of the current U.S.-led international order as denying Russia the place it deserves while threatening Russian interests.⁵ In 2017, a team led by Bryan Frederick stated that "Russian elites appear to have increasingly concluded that the United States and NATO represent long-term political and potentially military threats to the current regime in Moscow."6 The longstanding U.S. commitment to democracy and liberal values is perceived by Russia as, at best, a threat to regional stability and, at worst, an existential threat to the Russian regime; this represents another point of irreconcilability between the two countries.⁷ Given the right circumstances, Russia might undertake expeditionary interventions similar to the one in Syria, although its threshold for engaging in such interventions will be high.8

On the U.S. side, concerns likely will grow as Russia pursues a military buildup that will provide the capabilities to threaten the interests of the United States and its allies.

Initiated in 2008, Russia's military reform effort has borne fruit, and its capability for high-intensity conventional warfare continues to grow. The economic, demographic, and societal factors that support Russia's military buildup appear relatively stable in the medium term, and this trend should produce an "incremental modernization of Russia's military," creating a potential security challenge for the United States. 12

This military modernization is likely to have different effects in different military areas:

Russian C4ISR [command, control, communications, computers, intelligence, surveillance, and reconnaissance] and long-range strike is likely to improve, posing a greater threat to fixed U.S. and allied positions. Air defense and [electronic warfare] are likely to continue to experience gradual improvement in the coming years. While Russia is unlikely in the near term to significantly improve the quality of its indirect fires or adopt next-generation ground vehicles, among other things, its existing capabilities will continue to pose a threat.¹³

Moreover, Russian security policy goals, which have remained relatively consistent throughout Russia's (and,

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arguably, the Soviet Union's) history, ¹⁴ are not expected to change in the near future. ¹⁵

Competition between the United States and Russia will likely be the new normal in the near future, and this view appears to be shared by several U.S. European allies. As summarized by Michael J. Mazarr and his colleagues in 2018, "the emerging era of competition is likely to be a long-term, persistent struggle for advantage, something to be managed rather than won." ¹⁷

In-Between States Are at the Center of the Competition

A key element of the U.S-Russia competition is the political and strategic orientation of the in-between states—states that are located between the NATO alliance and Russia. These states are Ukraine, Moldova, Belarus, Armenia, Georgia, and Azerbaijan. In 2018, Charap, Shapiro, and Demus described "the question of their status" and "the broader regional order as it relates to them" as "what really divides Russia and the West." Among these former Soviet Union republics, Ukraine—the largest by far in terms of

both population and territory—plays a particularly important strategic role for Russia.¹⁹

Russia's desire to influence these countries' political orientation and to keep them within its so-called sphere of influence has deep historical roots. ²⁰ This desire can conflict both with U.S. support for liberal democracy and with the U.S.-endorsed notion that sovereign countries have the right to pursue membership in the institutions of their choice—including Western institutions, such as NATO and the European Union (EU). ²¹ Accommodation with Russia on this issue appears particularly unlikely. ²²

Meanwhile, tensions are likely to remain high between Russia and these countries, most of which perceive Moscow's ambitions as a potential threat. As David A. Shlapak noted in 2018,

Many of Russia's neighbors are discomfited by some of its approaches to securing its local *droit de regard*—which have included direct imperial expansion, the acquisition of clients or satellite states, or attempted subversion. The Kremlin's recent behavior has done nothing to assuage the concerns of those who find themselves ensconced on its borders.²³

The United States operates at a disadvantage in these in-between states. Russia's increasing ability to rapidly deploy forces, should it choose to do so, is an underlying threat that bolsters its informal dominance of the region. ²⁴ In the gray zone domain, Russia's ability to conduct hostile actions also is relatively stronger in former Soviet nations and neighboring states than outside that geographic area. ²⁵ (*Gray zone* tactics are hostile actions that aim to further Russia's strategic interests while remaining below the threshold of what could be perceived as an open act of war that invites armed retaliation.)

Attempts to engage the in-between countries can be difficult because they often already are permeated by Russian influence. In 2019, James Dobbins and colleagues examined whether the United States could "make [Russia's] foreign commitments costlier" in the Caucasus, but they found little opportunity to do so: "Russia enjoys even greater geographic advantages there, making it considerably more expensive, for instance, for the United States to defend Georgia than for Russia to threaten it." Belarus, too, offers limited prospects. Losing its only true ally in the region would be extremely damaging to Russia, but the United States is unlikely to be able to bring about that loss, and Russia might choose to prevent such an outcome through the use of military force. ²⁷

Building the capacity of some of these states, particularly in the security realm, could be a more promising option.²⁸ A 2017 study led by Christopher S. Chivvis argued that

efforts to strengthen the political, economic, and military capabilities of non-NATO allies susceptible to Russian interference, if well handled, should also help to reduce incentives for Russian aggression and, thereby, the incidence of small wars along Russia's periphery.²⁹

A 2015 study led by Olga Oliker similarly noted that "reducing vulnerabilities to subversion and creating morerobust, stable governments should help reduce prospects of conventional attack and at least marginally strengthen resistance thereto." Such assistance could be made conditional on political and economic reforms. The assistance could provide the additional benefits of making these regimes more stable and less vulnerable to Russian subversion in the long term. ³¹

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Focusing on political and economic reforms in these countries without making fundamental decisions about their alignments with Russia or the West was also the recommendation of Dobbins and Andrei Zagroski. ³² Likewise, in 2017, Andrew Radin and Clint Reach foresaw an engagement strategy that would combine some degree of recognition of Russian interests in these countries without closing the door to their potential integration in Western institutions. ³³ Charap further proposed a revised regional order based on alternative approaches in the areas of security architecture, economic integration, and regional conflicts. ³⁴

Conventional War Is Unlikely—but the United States Should Still Prepare for It

Competition is here to stay, but conventional war between the United States and Russia remains unlikely. Russia appears to be well aware of its conventional inferiority in Competition is here to stay, but conventional war between the United States and Russia remains unlikely.

comparison with NATO and of the damage that a conflict with NATO would inflict.³⁵ Moscow also believes that NATO's commitment to come to the defense of its members is sufficiently strong to make conventional aggression against a NATO member a very risky undertaking.³⁶

The Baltic states have generally been considered among the most vulnerable areas to a Russian attack because of their proximity to Russia and their limited abilities to stop or even slow a potential Russian offensive.³⁷ NATO's deterrent posture in the Baltics is not particularly strong; it lacks the number of troops and the infrastructure that would be needed to support a quick and effective response to Russian aggression in the region.³⁸ However, there is no indication that controlling all or even part of the Baltic states' territories is a strategic objective for Russia.³⁹ One RAND study cited Polish and Finnish officials and analysts who interpret Russia's aggressive posturing—such as the deployment of nuclear-capable missiles in Kaliningrad—as mere "bullying" or "intimidation" rather than as a precursor to an imminent Russian conventional attack against its neighbors. 40 Russia also appears to have tried to achieve its

strategic objectives in Syria while carefully avoiding a confrontation, with Russian forces stopping short of actions that might have provoked the United States. 41

However, the unlikelihood of a conventional Russian attack does not mean that a strong deterrent posture is unnecessary. A Russian conventional attack against NATO would have such dramatic consequences that it is worth investing in measures to prevent it. As David Ochmanek argued in 2015,

an estimate of the likelihood of a conflict is not a criterion in selecting scenarios for force planning. Scenario development is not and should not be an exercise in prediction. Throughout the Cold War, most observers believed that a Soviet-led Warsaw Pact invasion of Western Europe was unlikely, but this in no way invalidated the need to prepare forces (conventional and nuclear) to counter such an invasion; indeed, by doing so, NATO hoped to ensure that the probability of invasion remained low because a rational Soviet leader would be deterred from attempting it.⁴²

Other studies concurred that, as long as the risk of Russian aggression exists, the U.S. military should be prepared to counter it as an "insurance policy against a catastrophic disaster";⁴³ addressing NATO members' vulnerabilities to Russian aggression would reduce the likelihood of such an attack taking place.⁴⁴

Some studies went further by contending that the United States has not invested enough in deterrence. In 2019, a team led by Timothy M. Bonds found a significant gap between the U.S. policy to deter Russia and the U.S. resources required to fulfill that objective. ⁴⁵ Another study warned that both the U.S. European Deterrence Initia-

tive (formerly the European Reassurance Initiative) and NATO's Enhanced Forward Presence are merely tripwires, and not even effective ones, because of their small sizes; they would be unlikely to deter an aggressor. 46 Furthermore, NATO airpower faces two serious shortcomings for deterring aggression in the Baltic states: "First, the time line of the fight, as revealed by extensive wargaming, is so rapid that there would be insufficient time for NATO's air forces to stop the Russian advance," and "[a]irpower would also have limitations in preparing the battlefield for any NATO counteroffensive operations." 48

Denying Russian forces from the Baltic states would also be difficult. These countries' shared borders with Russia would facilitate a quick, devastating blow.⁴⁹ Russia is aware that it would be at a sharp disadvantage in a prolonged conflict with NATO,⁵⁰ but it "enjoys a favorable correlation of forces in a short-warning regional conflict on its borders," and its geographic position and ability to send in reinforcements promptly would give it a significant time-distance advantage early in a military campaign.⁵¹

Some elements of Russia's military reorganization support these types of quick offensives:

Recent reforms have made a substantially larger percentage of the land components of the Russian Armed Forces available at higher readiness for short-notice contingencies, while reducing the total number of units; units can deploy by rail to quickly build ground combat power within Russia in response to a crisis. ⁵²

Russian and Soviet history show several examples of military operations designed to accomplish specific objectives in a very small amount of time.⁵³ More broadly, although NATO's military capabilities largely surpass

those of Russia, the balance of forces locally is in Russia's favor, with the ground forces of NATO's northeastern members being no match for the forces of Russia's Western Military District. ⁵⁴ One way to address these issues would be strengthen the current deterrent posture in the Baltic states, ⁵⁵ although this could come with significant risks. ⁵⁶

Hostile Actions Below the Threshold of War Are Expected to Continue

Although a conventional war with Russia seems unlikely, Moscow's use of gray zone tactics—also described as "hybrid," "unconventional," or "political warfare" tactics—is well-documented and persistent. ⁵⁷ These actions take place in a variety of domains, from cyber and economics to information and politics, and are aimed toward various objectives, such as sowing dissent among national and local communities, steering them toward a more pro-Russia stance, or intimidating them. ⁵⁸

Similarly, cyber operations are meant to coerce and influence.⁵⁹ Russia's use of these tactics bears similarities to the methods used by other U.S. adversaries, particularly China.⁶⁰ Both Russia and China use social manipulation tactics and "appear to view such techniques as a source of leverage relative to open societies."⁶¹ Overall, gray zone tactics will be one of the main challenges that the United States will face in the coming decade, and the occurrence of such actions is likely to increase.⁶²

Although gray zone tactics largely occur in "nonmilitary areas of power," 63 they likely would be used to support any conventional Russian attack. Gray zone actions also can be precursors to a conventional attack; as Radin stated, "the major vulnerability to hybrid warfare in the Baltics

lies in Russian conventional forces that may 'back up' or accompany nonviolent or covert Russian aggression."⁶⁴
For instance, a conflict scenario in which paramilitaries and civilians prepare and facilitate the incursion of Russian special operations or conventional forces into a neighboring country—similar to what happened in eastern Ukraine—is theoretically possible. ⁶⁵ However, Russia's willingness to risk such actions would likely depend on whether this neighbor is a NATO member. Using such tactics to support conventional operations might help Russia compensate for its conventional inferiority against NATO, reduce the length of a conflict, and possibly deny NATO the time to send reinforcements. ⁶⁶

One way to compete in the information domain would be to provide the U.S. Department of Defense and U.S. Army greater means to operate. This might include expanding existing authorities, bringing in more personnel from the reserves with expertise in information operations and information-related capabilities, and rewarding these areas of expertise to make information-related careers more attractive. ⁶⁷ Another recommendation pertains to U.S. intelligence capabilities, which are critical to detecting political warfare. ⁶⁸ In the intelligence domain, the United States would benefit from "better intelligence gathering

and coordination and a clearer understanding of the signs of Russian covert aggression."⁶⁹

The United States could improve its response in the domains of information operations and social manipulation in other ways. After a thorough examination of the characteristics of such operations,⁷⁰ researchers found that preparing for and countering these threats might include the following strategies: avoiding countermessaging (and improving U.S. and NATO messaging instead),⁷¹ exposing and blocking Russian propaganda, building the resilience of populations most susceptible to be the targets of Russian propaganda, promoting local media that counter this propaganda, and tracking and analyzing Russian media content to maintain high awareness of the threat.⁷²

Russia Is Not Particularly Successful in Any Area of This Competition

Russia is often characterized as a near-peer competitor of the United States, but one should not overestimate how well Moscow is doing in this competition. Russia's track record appears middling at best, and no major change in the conditions that could raise its chances of success is expected in the near future.

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Russia's economic, demographic, and social conditions are not particularly good. The country's challenges include "looming demographic imbalances, severe environmental degradation, and the contradictions between authoritarian forms of governance and populations with access to greater material resources and outside sources of information"73 all challenges that Russia shares with China.⁷⁴ In the case of Russia, such trends are likely to persist over the next two decades.⁷⁵ Partly because of these trends, regime stability is uncertain;⁷⁶ Russian President Vladimir Putin watches closely—and warily—the reaction of the Russian elites and public to his actions.⁷⁷ Russia's challenges are reflected by the state's sensitivity to cost (with military campaigns all done on the cheap);⁷⁸ its long list of military vulnerabilities, from its comparative disadvantage in ground force resources to the decline of its scientific and technical capital;⁷⁹ and its inability to effect a long-term strategy in the Middle East. 80 Doing nothing—in other words, letting "the Russian government continue its poor regulatory regime, its state control, and its wasteful investments" might be the best U.S. course of action in some cases.81

Some of Russia's negative prospects were worsened by the Ukraine crisis. Russia had benefited economically from better integration into the global economic and financial system, but international sanctions and the drop in foreign investment that followed Russia's aggression in Ukraine damaged Russia's growth.⁸² A negotiated solution to the Ukraine crisis that included the termination of sanctions would likely have a significant positive effect on Russia's growth.⁸³

Even in areas in which Russia is seen as proficient, such as gray zone actions, there is little evidence of success. For instance, "the analysis suggests that much of Russian propaganda—including relatively expensive endeavors like RT [Russia Today]—may neither be as well-watched nor well-believed as some might presume." An analysis of five cases of Russian gray zone campaigns has shown some degree of tactical success but, overall, strategic failure. This failure might be partly the result of internal bureaucratic conflict that degrades Russia's ability to pursue effective information and political warfare. One study found that "Russian intelligence services and other actors compete and often collide in conducting their missions and are at times pursuing divergent agendas"—a challenge that is not lost on the Russian leadership. 86

Meanwhile, there is little evidence that Russia's efforts at hostile social manipulation have achieved any of their main objectives. ⁸⁷ As Mazarr and his team pointed out,

Even in cases where outcomes have matched Russia's objectives, Moscow has not been inventing the

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grievances that produced a few recent electoral or referendum outcomes—it has only been adding its voice to many others saying largely the same things. It is difficult to separate out the unique effect of each additional voice. One of the main imperatives going forward is for additional research into such questions.⁸⁸

The impact of cyber operations has been similarly disappointing for Russia.⁸⁹

Overall, it appears that the measures that Russia is most likely to use—such as disinformation or economic pressure—are unlikely to be successful, while actions that would be more threatening for NATO—such as the use of "little green men"—are less likely to occur. 90 As a result, the West tends to overestimate Russia's ability to "win" the gray zone competition, while underestimating its own resilience. 91

One reason for this apparent lack of success might be that Russia's gray zone targets are more resilient than is sometimes described. One study found that in the gray zone, "there are no obvious major vulnerabilities that Russia can easily exploit to its advantage within NATO";92 another study found that European countries present only limited vulnerabilities to trade or financial pressures from Russia.⁹³ The regions at risk closest to Russia (for instance, the Baltic states) have strong governance and institutions to respond to the threats, while those that lack such characteristics (such as Bulgaria, Greece, and Romania) are farther away from Russia and therefore are less likely to be targets of Russian subversion.94 The threat of Russian agents infiltrating a NATO or EU member appears limited as well. Potential candidates, such as Bulgaria and Greece, are not in a position that would allow them to unilaterally change NATO or EU policies, 95 while countries that could

challenge views within those organizations (such as the United Kingdom, France, Germany, and Italy) are not particularly vulnerable to Russian gray zone threats.⁹⁶

Finally, disrupting energy, trade, or financial flows could be costly for Russia, which also depends on the revenue associated with these flows. The vulnerabilities of such disruptions run both ways and limit Russia's leverage in the countries that it might be tempted to target.⁹⁷

Conversely, the United States could exploit Russian weaknesses. Russia's economy represents its greatest vulnerability across all domains, and the most effective pressure point for the United States might be Russia's overreliance on oil and gas revenue. 98 The United States also has a variety of military options, including investments in new military technologies, 99 to overextend Russia. However, targeting Russia's energy revenues instead has two major advantages: limited risks and limited costs. 100

The United States Has the Advantage but Should Tread Carefully

Just as Russia is struggling, the United States is doing relatively well. First of all, while Russia struggles to build reliable security relationships, the United States has a solid network of allies and partners that value their relationships with the United States. ¹⁰¹ Second, the U.S. military budget dwarfs that of Russia. ¹⁰² Third, U.S. military advantages include not just personnel numbers and capabilities but also proficiency in combat operations; the United States has extensive training and real-world experience. ¹⁰³ Fourth, the ability of Russian ground forces to deploy out of area is limited; Russia has insufficient sustainment capability and lacks basing, overflight, and naval access. ¹⁰⁴ As one study

noted, "this gap enhances deterrence and will be hard for [Russia] to close." 105

However, with the wrong policies, the United States could squander its advantages in three notable ways. The wrong responses to the Russian challenges could (1) create unnecessary risks of escalation, (2) waste resources, and (3) prove counterproductive.

In relation to the first risk, a 2020 study examined the military elements that could lead to unintended escalation between Russia and NATO. 106 Although U.S. and NATO force deployments in Europe are important deterrents to a potential Russian attack against the Baltic states, 107 Russia could exploit these deployments in several ways. As Radin pointed out in 2017, "Russian propaganda harps on the theme of NATO's aggressive intentions, and any buildup of NATO forces will inevitably feed into Russia depictions of NATO as seeking to encircle and isolate Russia."108 Russia also could feel genuinely threatened by such a move because it is particularly sensitive to NATO's capability to undertake conventional precision strikes at depth. 109 RAND studies have examined the potential impact on Russia of various posture reinforcement scenarios and assessed the pros and cons of U.S. deployments, including exercises, in Europe. Comparing the benefits of such a presence (increased deterrence, quicker availability for contingencies in Europe and nearby) with its costs (escalatory risk, opportunity cost), one study has found that if significant U.S. forces are to be positioned in Europe, then Central Europe might be less inflammatory than a location closer to the Russian border.110

The escalation risk of a U.S. and NATO posture enhancement in Eastern Europe would depend on several factors. One factor is how Russia would perceive its own While Russia struggles to build reliable security relationships, the United States has a solid network of allies and partners.

strength—and NATO's strength—at the time of the reinforcement. If Russia perceives NATO's strength to be high, the new posture might look particularly threatening to Moscow. 111 Another factor is timing; for instance, the 2017 study led by Frederick found that Russia has historically perceived a greater threat when announcements on missile defense are made at the same time as NATO discussions. on defense posture. 112 Therefore, it is useful to be careful with timing. Other precautions that the United States and NATO could take to limit not just the risks of escalation with Russia but hostile local reactions include limiting force presence to non-Russian speaking areas, refraining from deploying assets or engaging in activities that could be perceived as promoting regime change in Russia, and investing in public relations campaigns to explain the rationale behind the U.S. force presence and activities to local populations.¹¹³

From Russia's perspective, U.S. or NATO actions that could lead to regime change in Moscow or undermine Russia's nuclear deterrent would be acutely threatening and

destabilizing.¹¹⁴ The latter threat, in particular, requires special attention from the United States and NATO as they deploy systems that might be perceived by Russia as a direct threat to its ability to retaliate to a nuclear attack, thus increasing its incentives to strike first. As one study put it,

Given the centrality of Russia's nuclear deterrent to its security, Russia may be willing to run substantial risks to forestall further development of systems that may affect strategic stability. The disconnect between the two sides over the implications of NATO development of these systems thus has the potential to lead to conflict. 115

The second risk is wasted resources. U.S. strategies designed to deter or overextend Russia should not inadvertently overextend the United States by imposing high opportunity costs. For instance, a strategy of maritime reinforcement around Russia might remove resources from the Asia-Pacific region, where they are needed in the competition with China. 116

The third risk is counterproductivity. Several options would appear to be particularly counterproductive for the United States because they would be costly, destabilizing, or both.¹¹⁷ Such suboptimal options would include

posturing fighters close to Russia; reposturing or deploying more ballistic missile defense; and developing such exotic weapons as conventional intercontinental ballistic missiles (such as Prompt Global Strike), space-based weapons, or spaceplanes. 118

Similarly, larger and more-frequent NATO exercises in Europe would be seen as a potential boost for deterrence but "would, however, become disproportionately expensive if they involved deployment of significant U.S. ground forces based in the contiguous United States, particularly those involving heavy equipment."

U.S. actions could also prove counterproductive in the gray zone domain. One study of information operations strongly warned against "heavy-handed anti-Russia messaging," because it could backfire. 120 Another (counterintuitive) risk would be to be "too successful": One report warned that "political warfare can lead to unpredictable outcomes," while others advised that a Russia under the firm authority of Putin might not be the most dangerous scenario for the United States because "declining regime stability has the potential to lead to a more unpredictable Russian foreign policy," and a post-Putin era might see an even more aggressive leader come to power. 123 The

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United States should also be careful not to give too much credit to its opponent when its actions do not effectively warrant it, as in the case of "exaggerated claims" in the United States of Russian effectiveness at social manipulation. ¹²⁴ Furthermore, some options to address the gray zone challenges posed by Russia might undermine U.S. values. This issue is particularly salient when assessing how to mitigate the threat of Russian information operations and social manipulation, ¹²⁵ with one study highlighting potential adverse effects on freedom of speech. ¹²⁶

Finally, some countermeasures could prove counterproductive by damaging U.S. relations with its allies, particularly if the United States were to promote policies that its allies perceived as intruding in domestic politics. The treatment of Russian-speaking populations in the Baltic States could raise such concerns. Raphael S. Cohen and Radin noted that "the Baltic countries believe that they should have the lead role in developing policy toward Russian speakers," making it fairly unlikely that they would welcome U.S. assistance in this domain." Ben Connable and his team put such concerns in a broader context:

Improving measures-short-of-war capabilities and reducing risks to negotiated and tacit thresholds will require careful balancing between improvement in tactical capability and risks to U.S. prestige, influence, treasury, and moral standing. 128

Competition Does Not Preclude Engagement

Several studies make clear that competition with Russia does not render engagement irrelevant. The fact that

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the United States and Russia still share some common interests—the 2017 report by Radin and Reach, for instance, mentions the maintenance of the United Nations system—suggests that engagement remains possible. As Oliker and her team argued in 2015, the United States should develop a strategy toward Russia "that hedges against the worst possible outcomes, yet does not give up on Russia in the long-run or foreclose potential new opportunities for cooperation should they arise." ¹³⁰

Some degree of engagement with Russia might reinforce deterrence and prevent escalation. Only through communication with Russia can the United States and NATO make clear that their actions do not have offensive intentions, but aim only to reassure and protect NATO members. This two-track policy of deterrence and engagement is reminiscent of the relationship that the United States had with the Soviet Union from the mid-1960s to the end of the Cold War. This policy is also similar to the one adopted by some U.S. allies, as "most European states [...] have also been careful to keep channels of communication open with Moscow on a number of issues, from the implementation of the Minsk II agreement to counterterrorism and Syria." 133

Building resilience would undermine Russia's ability to opportunistically exploit existing vulnerabilities.

Discussions of conventional arms control in Europe would benefit from an understanding of both the potential escalatory perils in the NATO-Russia relationship and the types of measures that could prevent such escalation. Discussions of confidence-building and risk-reduction measures with Russia could also be useful in managing specific, emerging issues, such as the development of military artificial intelligence.

Engagement can take various forms. Oliker, Michael J. McNerney, and Lynn E. Davis proposed a "strategy of resilience and engagement," while another study has called for a "small steps" approach toward "islands of cooperation," such as Russia-Georgia trade talks or structured discussions at the Organization for Security and Co-operation in Europe. Engagement could take place in the economic domain through new bilateral agreements or a dialogue between the Western-led and Russian-led trade blocs. Engaging with Russia to extend the New Strategic Arms Reduction Treaty beyond 2021, as President Joe Biden and Putin agreed to do in early 2021, should help provide more transparency, stability, and predictability and prevent an expensive arms race. 139

The United States Can Help Allies and Partners Address Gray Zone Threats

The United States has a variety of options to deter Russia, either by threatening punishment or by denying it the ability to gain from aggression. In the gray zone, an effective alternative course of action might be to build U.S. and NATO resilience to Russian attacks. It Building resilience would undermine Russia's ability to opportunistically exploit existing vulnerabilities because "[r]ather than manufacturing political crises from start to finish, Russia appears to operate by creating pressure and intensifying social divides, and then taking advantage of crises once they emerge."

This approach toward resilience would be particularly relevant in the realms of information operations and social manipulation—where Russia, like China, seeks to take advantage of "seams and gaps in the social and information fabric of other countries." This opportunistic mindset of Russia's leadership is also at work in the Middle East, where Moscow shows a "short-term, pragmatic, and transactional approach to the region" approach that has shown some evidence of success but also presents risks and might be difficult to sustain. 145

The United States can help its allies address their own vulnerabilities, which could limit Russia's opportunities to conduct subversion operations. ¹⁴⁶ Security cooperation and partner capacity-building represent key tools in this regard. ¹⁴⁷ The United States can help its allies improve their total defense and unconventional warfare capabilities ¹⁴⁸ by building, in effect, a deterrent force that has the additional value of being defensive in nature and thus less inflammatory for Russia than new conventional deployments in

Europe. 149 One study that examined potential activities of these types that the United States could develop with Sweden, Finland, the Baltic States, and Poland has argued in favor of "deeper engagement" with these countries to bolster deterrence against Russia in the region. 150 U.S. partners in the Black Sea region could also benefit from U.S. assistance against cyber and other gray zone threats, such as disinformation, and from more intelligence sharing. 151

The civil affairs components of U.S. military services have important roles to play in building the resilience of U.S. allies. 152 More broadly, the country expertise and the degree of political, economic, and military awareness that civil affairs components provide are particularly valuable to the U.S. military in the domain of information operations¹⁵³ because "to successfully conduct psychological operations, one has to know the target population's attitudes and culture."154 Civil affairs teams also play important roles in upholding the U.S. and NATO enhanced force posture in Eastern Europe. As one report noted, "The provision of services by U.S. or NATO civil affairs teams is highly beneficial, especially in predominately Russianspeaking areas."155 Another study suggests ways in which partner capacity-building could be enhanced. These ways include "improving the quality and capacity of niche areas such as foreign area officers, units focused on providing security-force assistance, information operations, and military medical units" and "increasing the training, specialization, and tours of duty for U.S. personnel."156

U.S. Allies and Partners Play Key Roles in Helping the United States Prevail in the Competition

Just as the United States can help its allies and partners build resilience for the U.S. and NATO deterrence posture in Europe, working with these allies and partners can help the United States prevail in the competition with Russia (and China). As mentioned earlier, having allies and partners that value this relationship is a key advantage over Russia, which lacks a similar network. Providing military aid to allies and partners represents a way for the United States to take action against Russia while avoiding confrontation with this nuclear-armed rival.

Working with allies and partners is particularly important when it comes to responding to gray zone actions. 160 As noted by Morris and his team in 2019, "the United States should work with allies and partners to enhance resilience and build tools for competitive success against less-aggressive, more-gradual gray zone tactics, which are likely to remain persistent."161 It is critical to ensure that U.S. responses are aligned with those of local partners. 162 Security cooperation represents one way to address the gray zone challenge—for instance, by conducting appropriate exercises with allies. Although military exercises increasingly include hybrid components, one study recommended going further to "incorporate cyber capabilities, new intelligence approaches, civilian officials, special operations and nonmilitary (e.g., law enforcement) security forces, and various political and economic tools (e.g., public diplomacy actions, sanctions)."163

More generally—and looking beyond the gray zone—some studies argued that the United States and its allies

should increase the pace of their exercises. These should focus particularly on "robust and increasingly realistic deployment and warfighting exercises, combined with aggressive home station and predeployment training." ¹⁶⁴

Major Themes

Beyond the individual findings outlined earlier, RAND research on strategic competition with Russia points to four broader themes about what this dynamic means for the United States:

- the nature of the competition between the United States and Russia
- 2. the benefits for the United States of relying on multilateral action and supporting such multilateral forums as NATO
- 3. the need for a whole-of-government approach that would allow U.S. military and civilian actors to jointly counter Russian influence and coercion efforts in the military, economic, political, and social domains
- 4. the ways in which United States can respond to Russia's growing conventional capabilities.

Nature of the Competition

RAND research focused on the objects of the United States and Russia's competition and identified key points of friction between Russia's strategic objectives and U.S. strategic interests. Overall, Russia "seeks to protect the security of the regime, its influence within its region, and its influence as a great power." Competition with the United States arises because Russia "sees U.S. leadership, and its

continuing effort to expand liberal democracy, as a threat to these goals."¹⁶⁶ A complementary interpretation, which encompassed other U.S. adversaries in addition to Russia, alluded to these same three points—regime protection, regional influence, and power status—while emphasizing the regional aspect of the competition:

The sources of competition lie in a few identity asserting major powers determined to achieve key regional goals while pushing back against U.S. predominance and the disproportionate U.S. influence in setting global norms.¹⁶⁷

Russia's first strategic objective—securing its borders and regime—is clearly the most important one; to some extent, the other two objectives serve this first one. Russia's defense posture reflects this preoccupation:

Russia's military is postured to defend its homeland and vital industrial and population centers, using layered, integrated air defenses and a limited number of defensive bulwarks and buffer states to buy space and time to react to potential strikes or invasion.¹⁶⁸

Another report noted that "Russia sees itself largely on the defensive," 169 partly because of the role that it believes the United States has played in creating or encouraging the popular protest movements that triggered the color revolutions in eastern Europe and the Arab Spring—movements that destabilized or replaced existing regimes. 170 Securing borders involves some extent of control over one's periphery (the second objective); 171 this explains Russia's fixation on the status of the "in-between states" and "the broader regional order as it relates to them. 172 Involvement in regions farther away—such as the Middle East—gives Russia an opportunity to strengthen its claim to great

power status (the third objective).¹⁷³ The United States and Russia are also engaged in an ideological competition, with Russia promoting "anti-Westernism, polycentrism, antiliberalism, and conservatism" and trying to amplify the voices of those groups in Europe that share similar views.¹⁷⁴

However, the vast power differential unbalances the competition between the United States and Russia. As Dobbins, Howard J. Shatz, and Ali Wyne argued in 2019, "Russia is not a peer or near-peer competitor but rather a well-armed rogue state that seeks to subvert an international order it can never hope to dominate." The Mazarr team reached a similar conclusion in 2018 when it compared the U.S.-Russia and U.S.-China competitions: Unlike China, "Russia has the potential to cause difficulties on specific issues but does not have the global economic role or overall national power to reshape the system absent self-destructive bouts of aggression." ¹⁷⁶

This power differential helps explain why Russia has invested heavily in subversion and has resorted to gray zone measures, from supporting insurgents to interfering in foreign elections. ¹⁷⁷ Subversion, particularly when it targets groups from which Russia is excluded—such as NATO or the EU—provides Russia a chance to gain regional influence. ¹⁷⁸ This dynamic, in turn, suggests a possible response from the United States: "Maintaining and even strengthening transatlantic cohesion across all dimensions—military, diplomatic, and even economic"¹⁷⁹

Importance of Multilateral Action

Multilateral institutions represent the international order that Russia—and, to an even larger extent, China—is trying to reshape in its favor. This international order is

The vast power differential unbalances the competition between the United States and Russia.

one that the United States helped build and in which it plays a leading role; therefore, multilateral institutions represent a U.S. "competitive advantage" in its strategic competition with both Russia and China. Such institutions create the norms of acceptable behavior—an important source of power in such areas as information and cyber, where Russia is particularly active and where norms are being created. Establishing clear norms makes it possible to establish "attribution and clarity as to the norms violated and by whom." Social media represents another area for which clear and enforceable norms are needed.

In addition, multilateral institutions can play important roles in countering gray zone actions, particularly as target countries might be wary of reprisals if they respond unilaterally. It is important for the United States to prevent Russia (and China) from seeking to reshape international organizations according to their respective worldviews and ideologies, as they naturally tend to do. Is If the United States chooses retrenchment rather than its traditional global leadership role, both Russia and China could try to fill the void.

Better coordination could encourage multilateral action. NATO, in particular, could benefit from greater

coordination in responding collectively to Russia's below-the-threshold actions. A collective cyber deterrence policy, clearly articulating red lines that might invite retaliation, would be another improvement. Another domain in which NATO could make progress is intelligence coordination. In 2017, Radin and colleagues noted that Although NATO has made progress in developing institutions for intelligence sharing, NATO's structures and processes for intelligence sharing remain cumbersome and dependent on often-reluctant nations to share, Suggesting that more bilateral intelligence sharing might be necessary to compensate for NATO's weaknesses in this regard.

Importance of a Whole-of-Government Approach

Countering Russian threats cannot be solely a U.S. military task; an effective response requires a whole-of-government approach. As Cohen and Radin put it, "The U.S. military has a key role to play in deterring aggression (and possibly in assisting responses), but, in many cases, it will not have a leading role." This is particularly the case for U.S. efforts to counter Russian gray zone activities, which would require civilian organizations in key roles. 191 Potential U.S. responses to such activities include military, diplomatic,

informational, and economic options. Passia itself has long adopted an approach that mobilizes not only its entire government but also commercial firms, oligarchs, religious leaders, foundations, and other nongovernmental entities.

To counter Russian social media influence, for instance, the United States would benefit from better coordination not just between the executive and legislative branches but also with public-private partnerships. ¹⁹⁴ One study recommends that the United States "institute a formal mechanism for information-sharing that includes key players from the U.S. government and private social media companies." ¹⁹⁵ When engaging with its allies, the United States should similarly seek to develop whole-of-government strategies to build the resilience of these countries. ¹⁹⁶

There is little evidence that such an inclusive approach is being implemented to match the whole-of-government threat posed by Russia. As Robinson and her team noted in 2018, "interagency coordination remains a fundamental challenge" when the United States seeks to respond to political warfare, particularly information operations.¹⁹⁷

Countering Russian threats cannot be solely a U.S. military task; an effective response requires a whole-of-government approach.

Key U.S. Capability Gaps Against Russia's Conventional Capabilities

RAND has built a large body of research on Russia's military capabilities, doctrine, and strategy. Scott Boston and Dara Massicot outlined Russia's tactical and operational preferences;198 Radin and his team presented different models of development for Russia's ground combat capabilities.¹⁹⁹ Both streams of research highlight areas in which the United States should develop its own capabilities to ensure that it does not fall behind. Ochmanek delineated the following capability areas as the most critical for the United States to develop to retain an edge against Russia (as well as China): "Enhanced capabilities to strike the enemy's attacking forces early in a conflict," "resilient basing," "rapid suppression and/or destruction of enemy air defenses," "dominant situational awareness," and "cyber defense and offense."200 The United States might also modernize its long-range and short-range military aircraft, procure more munitions, and strengthen its space-based assets.201

Infrastructure represents another area of need. A 2015 report by Oliker and her team called for new NATO infrastructure in the Baltics, Bulgaria, Poland, and Romania in the areas of command and control, intelligence, and cyber. ²⁰² In a similar vein, a 2017 report by Chivvis and his team proposed reinforcements of air defense and deterrence in the Baltic region through adequate NATO infrastructure, proper training and equipment for forward air controllers, capabilities to respond to the antiaccess/area denial challenge, agreements on basing and overflight rights, closely integrated command and control, and better allied interoperability. ²⁰³ A 2020 report by Anika Binnendijk and her

team echoed the latter two recommendations by calling for a "high degree of interoperability and integration between European fifth-generation fighters and NATO's other air and joint forces" to achieve maximum effect in a high-intensity conflict with Russia.²⁰⁴

Conclusion: Areas for Further Research

Systematic and rigorous exploration of the following five topics could shed further light on how the United States could retain its competitive advantage over Russia:

- 1. conditions in the in-between countries
- 2. Baltic military and civilian capability gaps
- 3. deterrence impacts, improvements, and exercises
- 4. military, political, social, and economic vulnerabilities of U.S. allies and partners
- 5. fault lines between U.S. adversaries.

First, building on the finding that in-between countries are at the center of the competition, *more research is needed on the Russia-related risks in European countries that are not part of NATO and on what the competition is and should be in these countries.* Cohen and Radin cited Belarus, Bosnia and Herzegovina, Moldova, Serbia, and Ukraine as particular countries of interest.²⁰⁵ U.S. interests in these countries could be stated more explicitly. As one report suggests, "Additional research on U.S. and Russian interests, operations, and the risk of conflict is needed to evaluate and improve U.S. foreign policy in non-EU and non-NATO countries, and to prepare for the greater risk of conflict that might emerge from within these societies."²⁰⁶

Further research could produce a better understanding of the potential fault lines between Russia and China.

It would be particularly useful to identify warning signs of Russian aggression in these countries, based on their past interactions with Russia, and to be able to "differentiate between 'everyday' Russian exercises and influence operations and the start of a large-scale campaign mirroring the operation in Crimea."²⁰⁷ Understanding how the Russian military learns from recent operations might also help anticipate its behavior; however, "the Russian military is more adaptive than it was in the past," and "variance in future operations should be anticipated."²⁰⁸

Second, improving the defense and resilience of the Baltic states would benefit from additional research. The topic of engaging U.S. special operations forces with their Baltic counterparts is well covered, but *a more-comprehensive understanding of Baltic military and civilian capability gaps is still lacking*,²⁰⁹ although some important work has been done on the total defense and unconventional warfare capabilities of these countries.²¹⁰ Another gap in knowledge is the precise amount of investment

required—and the order of investment priority—for NATO to come to the defense of the Baltics with large combat formations, if needed.²¹¹

Third, *more research is needed on various issues related to deterring Russia*. For example, what is the impact of the U.S. deterrence policy against Russia on the perceptions of other U.S. adversaries?²¹² What NATO infrastructure improvements could best enhance U.S. deterrence of Russia in the Baltics—and how much would this cost?²¹³

Another set of questions, from a 2019 study led by Paul Davis, are focused on exercises for deterrence:

What should be the composition and frequency of NATO exercises that could enhance deterrence? What role should nuclear weapons (including their command and control) play in those exercises? How much would those exercises cost? How can those exercises be structured so as to not provoke Russian fears of a preemptive attack?²¹⁴

The role played by nonnuclear long-range weapons and cyber weapons on deterrence also deserves additional scrutiny.

Fourth, mapping the military, political, social, and economic vulnerabilities of U.S. allies and partners would be a much-needed first step to address the vulnerabilities and protect these countries from Russian coercion. One report suggested developing "better tools for identifying and attributing disinformation on social media," while another called for a better understanding of the dynamics that allow social manipulation to be successful and of efficient ways to counter such manipulation. Hethods to isolate Russia's specific contribution in waging disinformation campaigns are needed to differentiate Russian messages from other voices that might convey similar

messages,²¹⁸ and more-sophisticated tools are necessary to detect information operations at the aggregate, rather than the individual, level.²¹⁹ Another question of interest is under which circumstances cyber operations, as opposed to information operations, can be successful—recognizing that this has generally not been the case for Russia.²²⁰

Fifth, it might be useful to identify the fault lines between U.S. adversaries. Research could produce a better understanding of the potential fault lines between Russia and China—for example, how China would react if the United States were to integrate a policy of limited engage-

ment into its competition with Russia. Specifically, the United States could engage with Russia on the issue of strategic arms control—an area of disagreement between Russia and China.²²¹ Identifying other areas of disagreement between China and Russia could present opportunities for the United States.

Focusing on these understudied questions could lead to new and improved ways for the United States to reassure allies, limit Russia's ability to do harm, and maintain the U.S. advantage.

Notes

- ¹ U.S. Department of Defense, *National Security Strategy of the United States of America*. Washington, D.C.: Office of the Secretary of Defense, December 2017, p. 3.
- ² Samuel Charap, Jeremy Shapiro, and Alyssa Demus, *Rethinking the Regional Order for Post-Soviet Europe and Eurasia*, Santa Monica, Calif.: RAND Corporation, PE-297-CC/SFDFA, 2018, p. 3.
- ³ Raphael S. Cohen, Nathan Chandler, Shira Efron, Bryan Frederick, Eugeniu Han, Kurt Klein, Forrest E. Morgan, Ashley L. Rhoades, Howard J. Shatz, and Yuliya Shokh, *The Future of Warfare in 2030: Project Overview and Conclusions*, Santa Monica, Calif.: RAND Corporation, RR-2849/1-AF, 2020, pp. 36–38. See also Forrest E. Morgan and Raphael S. Cohen, *Military Trends and the Future of Warfare: The Changing Global Environment and Its Implications for the U.S. Air Force*, Santa Monica, Calif.: RAND Corporation, RR-2849/3-AF, 2020, p. 67.
- ⁴ Bryan Frederick, Matthew Povlock, Stephen Watts, Miranda Priebe, and Edward Geist, *Assessing Russian Reactions to U.S. and NATO Posture Enhancements*, Santa Monica, Calif.: RAND Corporation, RR-1879-AF, 2017, p. 74.
- ⁵ Andrew Radin and Clint Reach, *Russian Views of the International Order*, Santa Monica, Calif.: RAND Corporation, RR-1826-OSD, 2017, p. 85.
- ⁶ Frederick et al., 2017, p. 74.
- ⁷ Radin and Reach, 2017, p. 90.
- ⁸ Samuel Charap, Elina Treyger, and Edward Geist, *Understanding Russia's Intervention in Syria*, Santa Monica, Calif.: RAND Corporation, RR-3180-AF, 2019, p. 1. See also Ben Connable, Stephanie Young, Stephanie Pezard, Andrew Radin, Raphael S. Cohen, Katya Migacheva, and James Sladden, *Russia's Hostile Measures: Combating Russian Gray Zone Aggression Against NATO in the Contact, Blunt, and Surge Layers of Competition*, Santa Monica, Calif.: RAND Corporation, RR-2539-A, 2020.
- ⁹ Keith Crane, Olga Oliker, and Brian Nichiporuk, *Trends in Russia's Armed Forces: An Overview of Budgets and Capabilities*, Santa Monica, Calif.: RAND Corporation, RR-2573-A, 2019, p. 70; Scott Boston, Michael Johnson, Nathan Beauchamp-Mustafaga, and Yvonne K. Crane, *Assessing the Conventional Force Imbalance in Europe: Implications for Countering Russian Local Superiority*, Santa Monica, Calif.: RAND Corporation, RR-2402, 2018, p. 1.

- Andrew Radin, Lynn. E. Davis, Edward Geist, Eugeniu Han, Dara Massicot, Matthew Povlock, Clint Reach, Scott Boston, Samuel Charap, William Mackenzie, Katya Migacheva, Trevor Johnston, and Austin Long, The Future of the Russian Military: Russia's Ground Combat Capabilities and Implications for U.S. Russia Competition, Santa Monica, Calif.: RAND Corporation, RR-3099-A, 2019, p. 44.
- ¹¹ Radin et al., 2019, p. xii.
- ¹² Crane, Oliker, and Nichiporuk, 2019, p. 69.
- 13 Radin et al., 2019, p. 78.
- Olga Oliker, Christopher S. Chivvis, Keith Crane, Olesya Tkacheva, and Scott Boston, Russian Foreign Policy in Historical and Current Context: A Reassessment, Santa Monica, Calif.: RAND Corporation, PE-144-A, 2015, p. 4; Stephen J. Flanagan and Irina Chindea, Russia, NATO, and Black Sea Security Strategy: Regional Perspectives from a 2019 Workshop, Santa Monica, Calif.: RAND Corporation, CF-405-OSD, 2019, p. 1.
- ¹⁵ Radin et al., 2019, p. 17.
- Stephanie Pezard, Andrew Radin, Thomas S. Szayna, and F. Steven Larrabee, European Relations with Russia: Threat Perceptions, Responses, and Strategies in the Wake of the Ukrainian Crisis, Santa Monica, Calif.: RAND Corporation, RR-1579-A, 2017, pp. 53–55.
- Michael J. Mazarr, Jonathan S. Blake, Abigail Casey, Tim McDonald, Stephanie Pezard, and Michael Spirtas, *Understanding the Emerging Era of International Competition: Theoretical and Historical Perspectives*, Santa Monica, Calif.: RAND Corporation, RR-2726-AF, 2018, p. 36.
- ⁸ Charap, Shapiro, and Demus, 2018, p. 3.
- ¹⁹ Samuel Charap, Alyssa Demus, and Jeremy Shapiro, eds., Getting Out from "In-Between": Perspectives on the Regional Order in Post-Soviet Europe and Eurasia, Santa Monica, Calif.: RAND Corporation, CF-382-CC/SFDFA, 2018, p. 1.
- ²⁰ Oliker et al., 2015, p. 4; Flanagan and Chindea, 2019, p. 4.
- ²¹ Radin and Reach, 2017, p. 87.
- Stephen J. Flanagan, Anika Binnendijk, Irina A. Chindea, Katherine Costello, Geoffrey Kirkwood, Dara Massicot, and Clint Reach, *Russia*, *NATO*, and Black Sea Security, Santa Monica, Calif.: RAND Corporation, RR-357-1, 2020, p. 148.

- David A. Shlapak, *The Russian Challenge*, Santa Monica, Calif.: RAND Corporation, PE-250-A, 2018, p. 2.
- ²⁴ Radin et al., 2019, p. 74.
- Linda Robinson, Todd C. Helmus, Raphael S. Cohen, Alireza Nader, Andrew Radin, Madeline Magnuson, and Katya Migacheva, *Modern Political Warfare: Current Practices and Possible Responses*, Santa Monica, Calif.: RAND Corporation, RR-1772-A, 2018, pp. 103–104.
- ²⁶ James Dobbins, Raphael S. Cohen, Nathan Chandler, Bryan Frederick, Edward Geist, Paul DeLuca, Forrest E. Morgan, Howard J. Shatz, and Brent Williams, *Extending Russia: Competing from Advantageous Ground*, Santa Monica, Calif.: RAND Corporation, RR-3063-A, 2019, pp. xv-xvi.
- ²⁷ Dobbins et al., 2019, pp. 112–113.
- ²⁸ Radin et al., 2019, p. 74.
- ²⁹ Christopher S. Chivvis, Andrew Radin, Dara Massicot, and Clint Reach, *Strengthening Strategic Stability with Russia*, Santa Monica, Calif.: RAND Corporation, PE-234-OSD, 2017, p. 17.
- ³⁰ Olga Oliker, Michael J. McNerney, and Lynn E. Davis, *NATO Needs a Comprehensive Strategy for Russia*, Santa Monica, Calif.: RAND Corporation, PE-143-OSD, 2015, p. 16.
- Oliker, McNerney, and Davis, 2015, p. 16.
- Charap, Demus, and Shapiro, 2018, pp. 12 and 49.
- 33 Radin and Reach, 2017, p. 89.
- ³⁴ Samuel Charap, Jeremy Shapiro, John J. Drennan, Oleksandr Chalyi, Reinhard Krumm, Yulia Nikitina, and Gwendolyn Sasse, eds., *A Consensus Proposal for Revised Regional Order in Post-Soviet Europe and Eurasia*, Santa Monica, Calif.: RAND Corporation, CF-410-CC, 2018, pp. 79–82.
- ³⁵ Scott Boston and Dara Massicot, *The Russian Way of Warfare: A Primer*, Santa Monica, Calif.: RAND Corporation, PE-231-A, 2017, p. 1; Frederick et al., 2017, p. 73; Clint Reach, Vikram Kilambi, and Mark Cozad, *Russian Assessments and Applications of the Correlation of Forces and Means*, Santa Monica, Calif.: RAND Corporation, RR-4235-OSD, 2018, p. 127.
- ³⁶ Frederick et al., 2017, p. 73.

- ³⁷ Christopher S. Chivvis, Raphael S. Cohen, Bryan Frederick, Daniel S. Hamilton, F. Stephen Larrabee, and Bonny Lin, *NATO's Northeastern Flank: Emerging Opportunities for Engagement*, Santa Monica, Calif.: RAND Corporation, RR-1467-AF, 2017, p. 116.
- ³⁸ Paul K. Davis, J. Michael Gilmore, David R. Frelinger, Edward Geist, Christopher K. Gilmore, Jenny Oberholtzer, and Danielle C. Tarraf, *Exploring the Role Nuclear Weapons Could Play in Deterring Russian Threats to the Baltic States*, Santa Monica, Calif.: RAND Corporation, RR-2781-RC, 2019, pp. 46–48; David A. Shlapak and Michael Johnson, *Reinforcing Deterrence on NATO's Eastern Flank: Wargaming the Defense of the Baltics*, Santa Monica, Calif.: RAND Corporation, RR-1253-A. 2016.
- ³⁹ Frederick et al., 2017, p. 74; Radin et al., 2019, pp. 76–77.
- 40 Based on interviews conducted in 2015; Pezard et al., 2017, pp. 10–12.
- ⁴¹ James Dobbins, Howard J. Shatz, and Ali Wyne, *Russia Is a Rogue, Not a Peer; China Is a Peer, Not a Rogue*, Santa Monica, Calif.: RAND Corporation, PE-310-A, 2019, p. 8.
- ⁴² David Ochmanek, Sustaining U.S. Leadership in the Asia-Pacific Region: Why a Strategy of Direct Defense Against Antiaccess and Area Denial Threats Is Desirable and Feasible, Santa Monica, Calif.: RAND Corporation, PE-142-OSD, 2015, p. 4.
- ⁴³ Radin et al., 2019, pp. 76–77; Shlapak, 2018, p. 4.
- ⁴⁴ Boston et al., 2018, p. 11.
- ⁴⁵ Timothy M. Bonds, Michael J. Mazarr, James Dobbins, Michael J. Lostumbo, Michael Johnson, David A. Shlapak, Jeffrey Martini, Scott Boston, Cristina L. Garafola, John Gordon IV, Sonni Efron, Paul S. Steinberg, Yvonne K. Crane, and Daniel M. Norton, *America's Strategy-Resource Mismatch: Addressing the Gaps Between U.S. National Strategy and Military Capacity.* Santa Monica, Calif.: RAND Corporation, RR-2691, 2019, pp. 26, 160–164.
- ⁴⁶ Shlapak, 2018, p. 8.
- ⁴⁷ Shlapak, 2018, p. 10.
- ⁴⁸ Shlapak, 2018, p. 11.
- ⁴⁹ Boston and Massicot, 2017, p. 3; see also Boston et al., 2018, p. 1.
- Boston and Massicot, 2017, p. 1.

- ⁵¹ Boston et al., 2018, p. 1.
- ⁵² Boston and Massicot, 2017, p. 2.
- Boston and Massicot, 2017, p. 2.
- ⁵⁴ Boston et al., 2018, p. 1; on these issues, see also Reach, Kilambi, and Cozad, 2018.
- ⁵⁵ Shlapak, 2018, p. 12.
- Dobbins et al., 2019, pp. 226–227. On the option of an enhanced deterrent posture in the Black Sea Region, see Flanagan et al., 2020, p. 152.
- Connable, Young, et al., 2020b; Ben Connable, Jason H. Campbell, and Dan Madden, Stretching and Exploiting Thresholds for High-Order War: How Russia, China, and Iran Are Eroding American Influence Using Time-Tested Measures Short of War, Santa Monica, Calif.: RAND Corporation, RR-1003-A, 2016, pp. 17–19; Robinson et al., 2018, pp. 41–124; Andrew Radin, Hybrid Warfare in the Baltics: Threats and Potential Responses. Santa Monica, Calif.: RAND Corporation, RR-1577-AF, 2017; Pezard et al., 2017, pp. 16–22.
- ⁵⁸ Flanagan and Chindea, 2019, pp. 3 and 7; see also Lyle J. Morris, Michael J. Mazarr, Jeffrey W. Hornung, Stephanie Pezard, Anika Binnendijk, and Marta Kepe, *Gaining Competitive Advantage in the Gray Zone: Response Options for Coercive Aggression Below the Threshold of Major War*, Santa Monica: RAND Corporation, RR-2942-OSD, 2019, pp. 14–27.
- ⁵⁹ Quentin E. Hodgson, Logan Ma, Krystyna Marcinek, and Karen Schwindt, *Fighting Shadows in the Dark: Understanding and Countering Coercion in Cyberspace*, Santa Monica, Calif.: RAND Corporation, RR-2961-OSD, 2019, p. 9.
- ⁶⁰ Mazarr et al., 2018, p. 35.
- 61 Michael J. Mazarr, Abigail Casey, Alyssa Demus, Scott W. Harold, Luke J. Matthews, Nathan Beauchamp-Mustafaga, and James Sladden, Hostile Social Manipulation: Present Realities and Emerging Trends, Santa Monica, Calif.: RAND Corporation, RR-2713-OSD, 2019, p. 225.
- ⁶² Cohen et al., 2020, pp. 50–52; see also Morgan and Cohen, 2020, p. 67.
- 63 Mazarr et al., 2018, p. 35.
- 64 Radin, 2017, p. 31.

- 65 Boston and Massicot, 2017, p. 2.
- 66 Boston and Massicot, 2017, p. 2.
- 67 Christopher Paul, Colin P. Clarke, Michael Schwille, Jakub P. Hlavka, Michael A. Brown, Steven Davenport, Isaac R. Porche III, and Joel Harding, Lessons from Others for Future U.S. Army Operations in and Through the Information Environment, Santa Monica, Calif.: RAND Corporation, RR-1925/1-A, 2018, p. 44.
- 68 Robinson et al., 2018, p. 234.
- ⁶⁹ Radin et al., 2017, p. 33.
- Mazarr et al., 2019; Christopher Paul and Miriam Matthews, *The Russian "Firehose of Falsehood" Propaganda Model: Why It Might Work and Options to Counter It*, Santa Monica, Calif.: RAND Corporation, PE-198-OSD, 2016; and Robinson et al., 2018, pp. 226–232.
- ⁷¹ Robinson et al., 2018, p. 233.
- ⁷² Todd C. Helmus, Elizabeth Bodine-Baron, Andrew Radin, Madeline Magnuson, Joshua Mendelsohn, William Marcellino, Andriy Bega, and Zev Winkelman, *Russia Social Media Influence: Understanding Russian Propaganda in Eastern Europe*, Santa Monica, Calif.: RAND Corporation, RR-2237-OSD, 2018, p. 75; Paul and Matthews, 2016, pp. 9–11.
- ⁷³ Ochmanek, 2015, p. 17.
- ⁷⁴ Ochmanek, 2015, p. 17.
- ⁷⁵ Dobbins et al., 2019, p. 3.
- ⁷⁶ Frederick et al., 2017, p. 74.
- ⁷⁷ Oliker et al., 2015, p. 14.
- ⁷⁸ Frederick et al., 2017, p. 74.
- 79 Table 2.1 (p. 20) of Dobbins et al., 2019, highlights military vulnerabilities of the Russian Federation.
- ⁸⁰ James Sladden, Becca Wasser, Ben Connable, and Sarah Grand-Clement, *Russian Strategy in the Middle East*, Santa Monica, Calif.: RAND Corporation, PE-236-RC, 2017, p. 10.
- ⁸¹ Dobbins et al., 2019, p. xiii.
- 82 Oliker et al., 2015, pp. 8-14.

- ⁸³ Keith Crane, Shanthi Nataraj, Patrick B. Johnston, and Gursel Rafig oglu Aliyev, *Russia's Medium-Term Economic Prospects*, Santa Monica, Calif.: RAND Corporation, RR-1468-RC, 2016, p. 55.
- ⁸⁴ Robinson et al., 2018, p. 230.
- 85 Connable, Young, et al., 2020, pp. 48-51.
- ⁸⁶ Robinson et al., 2018, p. 102.
- ⁸⁷ Mazarr et al., 2019, p. 226.
- ⁸⁸ Mazarr et al., 2019, p. 227.
- ⁸⁹ Hodgson et al., 2019, p. 33.
- ⁹⁰ Raphael S. Cohen and Andrew Radin, *Russia's Hostile Measures in Europe: Understanding the Threat*, Santa Monica, Calif.: RAND Corporation, RR-1793-A, 2019, p. 145.
- 91 Stacie L. Pettyjohn and Becca Wasser, Competing in the Gray Zone: Russian Tactics and Western Responses, Santa Monica, Calif.: RAND Corporation, RR-2791-A, 2019, pp. 45–48.
- ⁹² Cohen and Radin, 2019, p. 146.
- ⁹³ F. Steven Larrabee, Stephanie Pezard, Andrew Radin, Nathan Chandler, Keith Crane, and Thomas S. Szayna, *Russia and the West After the Ukrainian Crisis*, Santa Monica, Calif.: RAND Corporation, RR-1305-A, 2017, pp. 69–70.
- ⁹⁴ Cohen and Radin, 2019, p. 146.
- ⁹⁵ Cohen and Radin, 2019, p. 146.
- ⁹⁶ Cohen and Radin, 2019, p. 147.
- ⁹⁷ Larrabee et al., 2017, p. 70.
- ⁹⁸ Dobbins et al., 2019, p. 271.
- ⁹⁹ Dobbins et al., 2019, Table 9.1 (pp. 274–275).
- Dobbins et al., 2019, p. 271.
- ¹⁰¹ Ochmanek, 2015, p. 16.
- ¹⁰² Ochmanek, 2015, p. 17.
- $^{103}\,$ Ochmanek, 2015, p. 16. However, Russia also has gained some of this experience through its operations in Syria.

- 104 Ben Connable, Abby Doll, Alyssa Demus, Dara Massicot, Clint Reach, Anthony Atler, William Mackenzie, Matthew Povlock, and Lauren Skrabala, Russia's Limit of Advance: Analysis of Russian Ground Force Deployment Capabilities and Limitations, RR-2563-A, Santa Monica, Calif.: RAND Corporation, 2020, pp. 53–64.
- ¹⁰⁵ Ochmanek, 2015, p. 16.
- Samuel Charap, Alice Lynch, John J. Drennan, Dara Massicot, and Giacomo Persi Paoli, A New Approach to Conventional Arms Control in Europe: Addressing the Security Challenges of the 21st Century, Santa Monica, Calif.: RAND Corporation, RR-4346, 2020, pp. 51–56.
- ¹⁰⁷ Chivvis, Radin, et al., 2017b, p. 17.
- ¹⁰⁸ Radin, 2017, p. 34.
- 109 Reach, Kilambi, and Cozad, 2018, p. 129.
- 110 Dobbins et al., 2019, p. xix.
- 111 Frederick et al., 2017, p. xiv.
- Frederick et al., 2017, p. 75.
- 113 Radin, 2017, pp. 35–36; see also Stephanie Pezard and Ashley Rhoades, *What Provokes Putin's Russia? Deterring Without Unintended Escalation*, Santa Monica, Calif.: RAND Corporation, PE-338-A, 2020, p. 18.
- Boston and Massicot, 2017, p. 2.
- ¹¹⁵ Frederick et al., 2019, p. 75.
- 116 Dobbins et al., 2019, p. 212.
- ¹¹⁷ Dobbins et al., 2019, p. xvii.
- Dobbins et al., 2019, p. xvii.
- ¹¹⁹ Dobbins et al., 2019, p. xix.
- ¹²⁰ Helmus et al., 2018, p. 71.
- ¹²¹ Robinson et al., 2018, p. 235.
- ¹²² Frederick et al., 2017, p. 74.
- Boston and Massicot, 2017, p. 3.
- ¹²⁴ Mazarr et al., 2019, p. 226.

- Elizabeth Bodine-Baron, Todd C. Helmus, Andrew Radin, and Elina Treyger, Countering Russian Social Media Influence, Santa Monica, Calif.: RAND Corporation, RR-2740-RC, 2018, p. 58.
- ¹²⁶ Bodine-Baron et al., 2018, p. 58.
- ¹²⁷ Cohen and Radin, 2019, p. 152.
- ¹²⁸ Connable et al., 2016, p. 29.
- 129 Radin and Reach, 2017, p. 86.
- ¹³⁰ Oliker et al., 2015, p. 25.
- 131 Shlapak, 2018, pp. 2, 14–15.
- ¹³² Shlapak, 2018, p. 15.
- ¹³³ Pezard et al., 2017, p. xii.
- 134 Charap et al., 2020, pp. 75–76.
- Forrest E. Morgan, Benjamin Boudreaux, Andrew J. Lohn, Mark Ashby, Christian Curriden, Kelly Klima, and Derek Grossman, Military Applications of Artificial Intelligence: Ethical Concerns in an Uncertain World, Santa Monica, Calif.: RAND Corporation, RR-3139-1-AF, 2020, p. 127.
- 136 Oliker, McNerney, and Davis, 2015, pp. 17–18.
- 137 Charap, Demus, and Shapiro, 2018, p. 3.
- 138 Charap, Demus, and Shapiro, p. 3; see pp. 49–51 for additional means of engagement.
- Frank G. Klotz, The Military Case for Extending the New START Agreement, Santa Monica, Calif.: RAND Corporation, PE-350-AF, February 2020, pp. 11-13, 21.
- ¹⁴⁰ Bonds et al., 2019, pp. 37-47.
- ¹⁴¹ Bodine-Baron et al., 2018, p. 57.
- ¹⁴² Robinson et al., 2018, p. 103.
- ¹⁴³ Mazarr et al., 2019, p. 226.
- ¹⁴⁴ Sladden et al., 2017, p. 10.
- ¹⁴⁵ Becca Wasser, The Limits of Russian Strategy in the Middle East, Santa Monica, Calif.: RAND Corporation, PE-340-RC, 2019.
- 146 Radin, 2017, p. 31.

- ¹⁴⁷ Chivvis, Radin, et al., 2017, p. 269.
- ¹⁴⁸ Stephen J. Flanagan, Jan Osburg, Anika Binnendijk, Marta Kepe, and Andrew Radin, *Deterring Russian Aggression in the Baltic States Through Resilience and Resistance*, Santa Monica, Calif.: RAND Corporation, RR-2779-OSD, 2019. pp. 27–28.
- ¹⁴⁹ Flanagan et al., 2019, p. 3.
- ¹⁵⁰ Chivvis, Radin, et al., 2017, p. 254.
- ¹⁵¹ Flanagan and Chindea, 2019, p. 13; Flanagan et al., 2020, p. 151.
- ¹⁵² Cohen and Radin, 2019, p. 154.
- ¹⁵³ Cohen and Radin, 2019, p. 155; Helmus et al., 2018, pp. 69 and 73.
- ¹⁵⁴ Robinson et al., 2018, p. 234.
- 155 Radin, 2017, p. 36.
- ¹⁵⁶ Radin et al., 2019, p. 75.
- 157 Christine Wormuth, Russia and China in the Middle East: Implications for the United States in an Era of Strategic Competition, testimony presented before the House Foreign Affairs Subcommittee on Middle East, North Africa and International Terrorism on May 9, 2019, Santa Monica, Calif.: RAND Corporation, CT-511, 2019, p. 7.
- ¹⁵⁸ Ochmanek, 2015, p. 16.
- Raphael S. Cohen, Eugeniu Han, and Ashley L. Rhoades, *Geopolitical Trends and the Future of Warfare: The Changing Global Environment and Its Implications for the U.S. Air Force*, Santa Monica, Calif.: RAND Corporation, RR-2849/2-AF, 2020, p. 52.
- ¹⁶⁰ Morris et al., 2019, p. 151.
- Morris et al., 2019, p. 136 (emphasis in original).
- ¹⁶² Morris et al., 2019, p. 131.
- ¹⁶³ Oliker et al., 2015, p. 15.
- ¹⁶⁴ Shlapak, 2018, pp. 13–14.
- ¹⁶⁵ Radin and Reach, 2017, p. 85.
- ¹⁶⁶ Radin and Reach, 2017, p. 85.
- Mazarr et al., 2019, p. 32.
- Boston and Massicot, 2017, p. 2.

- ¹⁶⁹ Robinson et al., 2018, p. 102.
- ¹⁷⁰ Robinson et al., 2018, p. 102.
- ¹⁷¹ Shlapak, 2018, p. 2.
- 172 Charap, Shapiro, and Demus, 2018, p. 3; Pezard and Rhoades, 2020, pp. 5–6.
- Wormuth, 2019, p. 4; Sladden et al., 2017, p. 3.
- 174 Stephen Watts, Nathan Beauchamp-Mustafaga, Benjamin N. Harris, and Clint Reach, Alternative Worldviews: Understanding Potential Trajectories of Great-Power Ideological Competition, Santa Monica, Calif.: RAND Corporation, RR-2982-NIC, 2020, pp. 7–8.
- Dobbins, Shatz, and Wyne, 2019, p. 2.
- ¹⁷⁶ Mazarr et al., 2018, p. 3.
- Dobbins, Shatz, and Wyne, 2019, p. 2.
- Dobbins, Shatz, and Wyne, 2019, p. 9.
- 179 Dobbins, Shatz, and Wyne, 2019, p. 16.
- ¹⁸⁰ Mazarr et al., 2018, p. 36.
- ¹⁸¹ Bodine-Baron et al., 2018, p. 55.
- ¹⁸² Bodine-Baron et al., 2018, p. 55.
- ¹⁸³ Morris et al., 2019, p. 131.
- ¹⁸⁴ Watts et al., 2020, pp. 12, 15–16.
- ¹⁸⁵ Cohen et al., 2020, p. 14.
- ¹⁸⁶ Radin, 2017, p. 34.
- ¹⁸⁷ Chivvis, Radin, et al., 2017b, pp. 16–17.
- ¹⁸⁸ Radin et al., 2017, p. 33.
- ¹⁸⁹ Radin et al., 2017, p. 33.
- ¹⁹⁰ Cohen and Radin, 2019, p. 148.
- ¹⁹¹ Pettyjohn and Wasser, 2019, pp. 43-44.
- ¹⁹² Morris et al., 2019, pp. 157–179.
- ¹⁹³ Cohen and Radin, 2019, p. 148.
- ¹⁹⁴ Bodine-Baron et al., 2018, p. 56.

- ¹⁹⁵ Bodine-Baron et al., 2018, p. 56.
- ¹⁹⁶ Cohen and Radin, 2019, p. 152; Oliker et al., 2015, p. 15.
- Robinson et al., 2018, p. 267. This study suggests ways to overcome this challenge, from adopting a Joint Interagency Task Force model to re-creating some form of United States Information Agency (pp. 269–270).
- Boston and Massicot, 2017, p. 2.
- ¹⁹⁹ Radin et al., 2019, p. xii.
- ²⁰⁰ Ochmanek, 2015, p. 13.
- ²⁰¹ Ochmanek, 2015, pp. 14–15.
- ²⁰² Oliker et al., 2015, p. 14.
- ²⁰³ Chivvis, Cohen, et al., 2017, p. xiii.
- Anika Binnendijk, Gene Germanovich, Bruce McClintock, and Sarah Heintz, *At the Vanguard: European Contributions to NATO's Future Combat Airpower*, Santa Monica, Calif.: RAND Corporation, RR-A311-1, 2020, p. 157.
- ²⁰⁵ Cohen and Radin, 2019, p. 147.
- ²⁰⁶ Cohen and Radin, 2019, pp. 147–148.
- ²⁰⁷ Radin et al., 2017, p. 33.
- Boston and Massicot, 2017, p. 3.
- ²⁰⁹ Radin, 2017, p. 34.
- ²¹⁰ Flanagan et al., 2019.
- ²¹¹ Shlapak, 2018, p. 13.
- ²¹² Pezard and Rhoades, 2020, p. 19.
- ²¹³ Davis et al., 2019, pp. 89–90.
- Davis et al., 2019, p. 90.
- ²¹⁵ Oliker et al., 2015, p. 17.
- ²¹⁶ Bodine-Baron et al., 2018, p. 57.
- Mazarr et al., 2019, p. 228. This report offers detailed suggestions of proposed research topics (p. 229).
- ²¹⁸ Mazarr et al., 2019, p. 227.

- ²¹⁹ William Marcellino, Krystyna Marcinek, Stephanie Pezard, and Miriam Matthews, *Detecting Malign or Subversive Information Efforts over Social Media: Scalable Analytics for Early Warning*, Santa Monica, Calif.: RAND Corporation, RR-4192-EUCOM, 2020, p. 31.
- ²²⁰ Hodgson et al., 2019, p. 33.

Samuel Charap, *The Demise of the INF: Implications for Russia-China Relations*, Santa Monica, Calif.: RAND Corporation, testimony presented before the U.S.-China Economic and Security Review Commission on March 21, 2019, CT-507, 2019. p. 7.

References

Binnendijk, Anika, Gene Germanovich, Bruce McClintock, and Sarah Heintz, At the Vanguard: European Contributions to NATO's Future Combat Airpower, Santa Monica, Calif.: RAND Corporation, RR-A311-1, 2020. As of May 25, 2021:

https://www.rand.org/pubs/research_reports/RRA311-1.html

Bodine-Baron, Elizabeth, Todd C. Helmus, Andrew Radin, and Elina Treyger, *Countering Russian Social Media Influence*, Santa Monica, Calif.: RAND Corporation, RR-2740-RC, 2018. As of May 25, 2021: https://www.rand.org/pubs/research_reports/RR2740.html

Bonds, Timothy M., Michael J. Mazarr, James Dobbins, Michael J. Lostumbo, Michael Johnson, David A. Shlapak, Jeffrey Martini, Scott Boston, Cristina L. Garafola, John Gordon IV, Sonni Efron, Paul S. Steinberg, Yvonne K. Crane, and Daniel M. Norton, *America's Strategy-Resource Mismatch: Addressing the Gaps Between U.S. National Strategy and Military Capacity.* Santa Monica, Calif.: RAND Corporation, RR-2691, 2019. As of May 25, 2021:

https://www.rand.org/pubs/research_reports/RR2691.html

Boston, Scott, Michael Johnson, Nathan Beauchamp-Mustafaga, and Yvonne K. Crane, Assessing the Conventional Force Imbalance in Europe: Implications for Countering Russian Local Superiority, Santa Monica, Calif.: RAND Corporation, RR-2402, 2018. As of May 25, 2021: https://www.rand.org/pubs/research_reports/RR2402.html

Boston, Scott, and Dara Massicot, *The Russian Way of Warfare: A Primer*, Santa Monica, Calif.: RAND Corporation, PE-231-A, 2017. As of May 25, 2021:

https://www.rand.org/pubs/perspectives/PE231.html

Charap, Samuel, *The Demise of the INF: Implications for Russia-China Relations*, Santa Monica, Calif.: RAND Corporation, testimony presented before the U.S.-China Economic and Security Review Commission on March 21, 2019, CT-507, 2019. As of May 25, 2021: https://www.rand.org/pubs/testimonies/CT507.html

Charap, Samuel, Alyssa Demus, and Jeremy Shapiro, eds., *Getting Out from "In-Between": Perspectives on the Regional Order in Post-Soviet Europe and Eurasia*, Santa Monica, Calif.: RAND Corporation, CF-382-CC/SFDFA, 2018. As of May 25, 2021: https://www.rand.org/pubs/conf_proceedings/CF382.html

Charap, Samuel, Alice Lynch, John J. Drennan, Dara Massicot, and Giacomo Persi Paoli, *A New Approach to Conventional Arms Control in Europe: Addressing the Security Challenges of the 21st Century*, Santa Monica, Calif.: RAND Corporation, RR-4346, 2020. As of May 25, 2021: https://www.rand.org/pubs/research_reports/RR4346.html

Charap, Samuel, Jeremy Shapiro, and Alyssa Demus, *Rethinking the Regional Order for Post-Soviet Europe and Eurasia*, Santa Monica, Calif.: RAND Corporation, PE-297-CC/SFDFA, 2018. As of May 25, 2021: https://www.rand.org/pubs/perspectives/PE297.html

Charap, Samuel, Jeremy Shapiro, John J. Drennan, Oleksandr Chalyi, Reinhard Krumm, Yulia Nikitina, and Gwendolyn Sasse, eds., *A Consensus Proposal for Revised Regional Order in Post-Soviet Europe and Eurasia*, Santa Monica, Calif.: RAND Corporation, CF-410-CC, 2018. As of May 25, 2021:

https://www.rand.org/pubs/conf_proceedings/CF410.html

Charap, Samuel, Elina Treyger, and Edward Geist, *Understanding Russia's Intervention in Syria*, Santa Monica, Calif.: RAND Corporation, RR-3180-AF, 2019. As of May 25, 2021:

https://www.rand.org/pubs/research_reports/RR3180.html

Chivvis, Christopher S., Raphael S. Cohen, Bryan Frederick, Daniel S. Hamilton, F. Stephen Larrabee, and Bonny Lin, *NATO's Northeastern Flank: Emerging Opportunities for Engagement*, Santa Monica, Calif.: RAND Corporation, RR-1467-AF, 2017. As of May 25, 2021: https://www.rand.org/pubs/research_reports/RR1467.html

Chivvis, Christopher S., Andrew Radin, Dara Massicot, and Clint Reach, *Strengthening Strategic Stability with Russia*, Santa Monica, Calif.: RAND Corporation, PE-234-OSD, 2017. As of May 25, 2021: https://www.rand.org/pubs/perspectives/PE234.html

Cohen, Raphael S., Nathan Chandler, Shira Efron, Bryan Frederick, Eugeniu Han, Kurt Klein, Forrest E. Morgan, Ashley L. Rhoades, Howard J. Shatz, and Yuliya Shokh, *The Future of Warfare in 2030: Project Overview and Conclusions*, Santa Monica, Calif.: RAND Corporation, RR-2849/1-AF, 2020. As of May 25, 2021: https://www.rand.org/pubs/research_reports/RR2849z1.html

Cohen, Raphael S., Eugeniu Han, and Ashley L. Rhoades, *Geopolitical Trends and the Future of Warfare: The Changing Global Environment and Its Implications for the U.S. Air Force*, Santa Monica, Calif.: RAND Corporation, RR-2849/2-AF, 2020. As of May 25, 2021: https://www.rand.org/pubs/research_reports/RR2849z2.html

Cohen, Raphael S., and Andrew Radin, *Russia's Hostile Measures in Europe: Understanding the Threat*, Santa Monica, Calif.: RAND Corporation, RR-1793-A, 2019. As of May 25, 2021: https://www.rand.org/pubs/research_reports/RR1793.html

Connable, Ben, Jason H. Campbell, and Dan Madden, Stretching and Exploiting Thresholds for High-Order War: How Russia, China, and Iran Are Eroding American Influence Using Time-Tested Measures Short of War, Santa Monica, Calif.: RAND Corporation, RR-1003-A, 2016. As of May 25, 2021:

https://www.rand.org/pubs/research_reports/RR1003.html

Connable, Ben, Abby Doll, Alyssa Demus, Dara Massicot, Clint Reach, Anthony Atler, William Mackenzie, Matthew Povlock, and Lauren Skrabala, *Russia's Limit of Advance: Analysis of Russian Ground Force Deployment Capabilities and Limitations*, RR-2563-A, Santa Monica, Calif.: RAND Corporation, 2020. As of May 25, 2021: https://www.rand.org/pubs/research_reports/RR2563.html

Connable, Ben, Stephanie Young, Stephanie Pezard, Andrew Radin, Raphael S. Cohen, Katya Migacheva, and James Sladden, *Russia's Hostile Measures: Combating Russian Gray Zone Aggression Against NATO in the Contact, Blunt, and Surge Layers of Competition*, Santa Monica, Calif.: RAND Corporation, RR-2539-A, 2020. As of May 25, 2021: https://www.rand.org/pubs/research_reports/RR2539.html

Crane, Keith, Shanthi Nataraj, Patrick B. Johnston, and Gursel Rafig oglu Aliyev, *Russia's Medium-Term Economic Prospects*, Santa Monica, Calif.: RAND Corporation, RR-1468-RC, 2016. As of May 25, 2021: https://www.rand.org/pubs/research_reports/RR1468.html

Crane, Keith, Olga Oliker, and Brian Nichiporuk, *Trends in Russia's Armed Forces: An Overview of Budgets and Capabilities*, Santa Monica, Calif.: RAND Corporation, RR-2573-A, 2019. As of May 25, 2021: https://www.rand.org/pubs/research_reports/RR2573.html

Davis, Paul K., J. Michael Gilmore, David R. Frelinger, Edward Geist, Christopher K. Gilmore, Jenny Oberholtzer, and Danielle C. Tarraf, *Exploring the Role Nuclear Weapons Could Play in Deterring Russian Threats to the Baltic States*, Santa Monica, Calif.: RAND Corporation, RR-2781-RC, 2019. As of May 25, 2021: https://www.rand.org/pubs/research_reports/RR2781.html

Dobbins, James, Raphael S. Cohen, Nathan Chandler, Bryan Frederick, Edward Geist, Paul DeLuca, Forrest E. Morgan, Howard J. Shatz, and Brent Williams, *Extending Russia: Competing from Advantageous Ground*, Santa Monica, Calif.: RAND Corporation, RR-3063-A, 2019. As of May 25, 2021:

https://www.rand.org/pubs/research_reports/RR3063.html

Dobbins, James, Howard J. Shatz, and Ali Wyne, *Russia Is a Rogue*, *Not a Peer; China Is a Peer, Not a Rogue*, Santa Monica, Calif.: RAND Corporation, PE-310-A, 2019. As of May 25, 2021: https://www.rand.org/pubs/perspectives/PE310.html

Flanagan, Stephen J., Anika Binnendijk, Irina A. Chindea, Katherine Costello, Geoffrey Kirkwood, Dara Massicot, and Clint Reach, *Russia, NATO, and Black Sea Security*, Santa Monica, Calif.: RAND Corporation, RR-357-1, 2020. As of May 25, 2021: https://www.rand.org/pubs/research_reports/RRA357-1.html

Flanagan, Stephen J., and Irina Chindea, *Russia, NATO, and Black Sea Security Strategy: Regional Perspectives from a 2019 Workshop*, Santa Monica, Calif.: RAND Corporation, CF-405-OSD, 2019. As of May 25, 2021:

https://www.rand.org/pubs/conf_proceedings/CF405.html

Flanagan, Stephen J., Jan Osburg, Anika Binnendijk, Marta Kepe, and Andrew Radin, *Deterring Russian Aggression in the Baltic States Through Resilience and Resistance*, Santa Monica, Calif.: RAND Corporation, RR-2779-OSD, 2019. As of May 25, 2021: https://www.rand.org/pubs/research_reports/RR2779.html

Frederick, Bryan, Matthew Povlock, Stephen Watts, Miranda Priebe, and Edward Geist, Assessing Russian Reactions to U.S. and NATO Posture Enhancements, Santa Monica, Calif.: RAND Corporation, RR-1879-AF, 2017. As of May 25, 2021: https://www.rand.org/pubs/research_reports/RR1879.html

Helmus, Todd C., Elizabeth Bodine-Baron, Andrew Radin, Madeline Magnuson, Joshua Mendelsohn, William Marcellino, Andriy Bega, and Zev Winkelman, *Russian Social Media Influence: Understanding Russian Propaganda in Eastern Europe*, Santa Monica, Calif.: RAND Corporation, RR-2237-OSD, 2018. As of May 25, 2021: https://www.rand.org/pubs/research_reports/RR2237.html

Hodgson, Quentin E., Logan Ma, Krystyna Marcinek, and Karen Schwindt, Fighting Shadows in the Dark: Understanding and Countering Coercion in Cyberspace, Santa Monica, Calif.: RAND Corporation, RR-2961-OSD, 2019. As of May 25, 2021: https://www.rand.org/pubs/research_reports/RR2961.html

Klotz, Frank G., *The Military Case for Extending the New START Agreement*, Santa Monica, Calif.: RAND Corporation, PE-350-AF, February 2020. As of May 25, 2021: https://www.rand.org/pubs/perspectives/PE350.html

Larrabee, F. Steven, Stephanie Pezard, Andrew Radin, Nathan Chandler, Keith Crane, and Thomas S. Szayna, *Russia and the West After the Ukrainian Crisis*, Santa Monica, Calif.: RAND Corporation, RR-1305-A, 2017. As of May 25, 2021:

https://www.rand.org/pubs/research_reports/RR1305.html

Marcellino, William, Krystyna Marcinek, Stephanie Pezard, and Miriam Matthews, *Detecting Malign or Subversive Information Efforts over Social Media: Scalable Analytics for Early Warning*, Santa Monica, Calif.: RAND Corporation, RR-4192-EUCOM, 2020. As of May 25, 2021:

https://www.rand.org/pubs/research_reports/RR4192.html

Mazarr, Michael J., Jonathan S. Blake, Abigail Casey, Tim McDonald, Stephanie Pezard, and Michael Spirtas, *Understanding the Emerging Era of International Competition: Theoretical and Historical Perspectives*, Santa Monica, Calif.: RAND Corporation, RR-2726-AF, 2018. As of May 25, 2021:

https://www.rand.org/pubs/research_reports/RR2726.html

Mazarr, Michael J., Abigail Casey, Alyssa Demus, Scott W. Harold, Luke J. Matthews, Nathan Beauchamp-Mustafaga, and James Sladden, *Hostile Social Manipulation: Present Realities and Emerging Trends*, Santa Monica, Calif.: RAND Corporation, RR-2713-OSD, 2019. As of May 25, 2021:

https://www.rand.org/pubs/research_reports/RR2713.html

Morgan, Forrest E., Benjamin Boudreaux, Andrew J. Lohn, Mark Ashby, Christian Curriden, Kelly Klima, and Derek Grossman, *Military Applications of Artificial Intelligence: Ethical Concerns in an Uncertain World*, Santa Monica, Calif.: RAND Corporation, RR-3139-1-AF, 2020. As of May 25, 2021:

https://www.rand.org/pubs/research_reports/RR3139-1.html

Morgan, Forrest E., and Raphael S. Cohen, *Military Trends and the Future of Warfare: The Changing Global Environment and Its Implications for the U.S. Air Force*, Santa Monica, Calif.: RAND Corporation, RR-2849/3-AF, 2020. As of May 25, 2021: https://www.rand.org/pubs/research_reports/RR2849z3.html

Morris, Lyle J., Michael J. Mazarr, Jeffrey W. Hornung, Stephanie Pezard, Anika Binnendijk, and Marta Kepe, *Gaining Competitive Advantage in the Gray Zone: Response Options for Coercive Aggression Below the Threshold of Major War*, Santa Monica: RAND Corporation, RR-2942-OSD, 2019. As of May 25, 2021: https://www.rand.org/pubs/research_reports/RR2942.html

Ochmanek, David, Sustaining U.S. Leadership in the Asia-Pacific Region: Why a Strategy of Direct Defense Against Antiaccess and Area Denial Threats Is Desirable and Feasible, Santa Monica, Calif.: RAND Corporation, PE-142-OSD, 2015. As of May 25, 2021: https://www.rand.org/pubs/perspectives/PE142.html

Oliker, Olga, Christopher S. Chivvis, Keith Crane, Olesya Tkacheva, and Scott Boston, *Russian Foreign Policy in Historical and Current Context: A Reassessment*, Santa Monica, Calif.: RAND Corporation, PE-144-A, 2015. As of May 25, 2021:

https://www.rand.org/pubs/perspectives/PE144.html

Oliker, Olga, Michael J. McNerney, and Lynn E. Davis, *NATO Needs a Comprehensive Strategy for Russia*, Santa Monica, Calif.: RAND Corporation, PE-143-OSD, 2015. As of May 25, 2021: https://www.rand.org/pubs/perspectives/PE143.html

Paul, Christopher, Colin P. Clarke, Michael Schwille, Jakub P. Hlavka, Michael A. Brown, Steven Davenport, Isaac R. Porche III, and Joel Harding, Lessons from Others for Future U.S. Army Operations in and Through the Information Environment, Santa Monica, Calif.: RAND Corporation, RR-1925/1-A, 2018. As of May 25, 2021: https://www.rand.org/pubs/research_reports/RR1925z1.html

Paul, Christopher, and Miriam Matthews, *The Russian "Firehose of Falsehood" Propaganda Model: Why It Might Work and Options to Counter It*, Santa Monica, Calif.: RAND Corporation, PE-198-OSD, 2016. As of May 25, 2021:

https://www.rand.org/pubs/perspectives/PE198.html

Pettyjohn, Stacie L., and Becca Wasser, *Competing in the Gray Zone: Russian Tactics and Western Responses*, Santa Monica, Calif.: RAND Corporation, RR-2791-A, 2019. As of May 25, 2021: https://www.rand.org/pubs/research_reports/RR2791.html

Pezard, Stephanie, Andrew Radin, Thomas S. Szayna, and F. Steven Larrabee, European Relations with Russia: Threat Perceptions, Responses, and Strategies in the Wake of the Ukrainian Crisis, Santa Monica, Calif.: RAND Corporation, RR-1579-A, 2017. As of May 25, 2021:

https://www.rand.org/pubs/research_reports/RR1579.html

Pezard, Stephanie, and Ashley Rhoades, *What Provokes Putin's Russia? Deterring Without Unintended Escalation*, Santa Monica, Calif.: RAND Corporation, PE-338-A, 2020. As of May 25, 2021: https://www.rand.org/pubs/perspectives/PE338.html

Radin, Andrew, *Hybrid Warfare in the Baltics: Threats and Potential Responses.* Santa Monica, Calif.: RAND Corporation, RR-1577-AF, 2017. As of May 25, 2021:

https://www.rand.org/pubs/research reports/RR1577.html

Radin, Andrew, Lynn. E. Davis, Edward Geist, Eugeniu Han, Dara Massicot, Matthew Povlock, Clint Reach, Scott Boston, Samuel Charap, William Mackenzie, Katya Migacheva, Trevor Johnston, and Austin Long, *The Future of the Russian Military: Russia's Ground Combat Capabilities and Implications for U.S. Russia Competition*, Santa Monica, Calif.: RAND Corporation, RR-3099-A, 2019. As of May 25, 2021: https://www.rand.org/pubs/research_reports/RR3099.html

Radin, Andrew, and Clint Reach, *Russian Views of the International Order*, Santa Monica, Calif.: RAND Corporation, RR-1826-OSD, 2017. As of May 25, 2021:

https://www.rand.org/pubs/research_reports/RR1826.html

Reach, Clint, Vikram Kilambi, and Mark Cozad, *Russian Assessments and Applications of the Correlation of Forces and Means*, Santa Monica, Calif.: RAND Corporation, RR-4235-OSD, 2018. As of May 25, 2021: https://www.rand.org/pubs/research_reports/RR4235.html

Robinson, Linda, Todd C. Helmus, Raphael S. Cohen, Alireza Nader, Andrew Radin, Madeline Magnuson, and Katya Migacheva, *Modern Political Warfare: Current Practices and Possible Responses*, Santa Monica, Calif.: RAND Corporation, RR-1772-A, 2018. As of May 25, 2021:

https://www.rand.org/pubs/research_reports/RR1772.html

Shlapak, David A., *The Russian Challenge*, Santa Monica, Calif.: RAND Corporation, PE-250-A, 2018. As of May 25, 2021: https://www.rand.org/pubs/perspectives/PE250.html

Shlapak, David A., and Michael Johnson, *Reinforcing Deterrence on NATO's Eastern Flank: Wargaming the Defense of the Baltics*, Santa Monica, Calif.: RAND Corporation, RR-1253-A, 2016. As of May 25, 2021:

https://www.rand.org/pubs/research_reports/RR1253.html

Sladden, James, Becca Wasser, Ben Connable, and Sarah Grand-Clement, *Russian Strategy in the Middle East*, Santa Monica, Calif.: RAND Corporation, PE-236-RC, 2017. As of May 25, 2021: https://www.rand.org/pubs/perspectives/PE236.html

U.S. Department of Defense, *National Security Strategy of the United States of America*, Washington, D.C.: Office of the Secretary of Defense, December 2017.

Wasser, Becca, *The Limits of Russian Strategy in the Middle East*, Santa Monica, Calif.: RAND Corporation, PE-340-RC, 2019. As of May 25, 2021:

https://www.rand.org/pubs/perspectives/PE340.html

Watts, Stephen, Nathan Beauchamp-Mustafaga, Benjamin N. Harris, and Clint Reach, *Alternative Worldviews: Understanding Potential Trajectories of Great-Power Ideological Competition*, Santa Monica, Calif.: RAND Corporation, RR-2982-NIC, 2020. As of May 25, 2021: https://www.rand.org/pubs/research_reports/RR2982.html

Wormuth, Christine, Russia and China in the Middle East: Implications for the United States in an Era of Strategic Competition, testimony presented before the House Foreign Affairs Subcommittee on Middle East, North Africa and International Terrorism on May 9, 2019, Santa Monica, Calif.: RAND Corporation, CT-511, 2019. As of May 25, 2021: https://www.rand.org/pubs/testimonies/CT511.html

About This Perspective

This research primer presents key findings and themes from recent RAND research on the strategic competition between Russia and the United States. This review of RAND reports since 2015 highlights nine major findings: (1) The U.S.-Russia strategic competition likely will be long-lasting; (2) states "in between" Russia and NATO are at the center of this competition; (3) conventional war is unlikely (but the United States should still prepare for it); (4) Russian hostile actions below the threshold of war will likely continue; (5) Russia's achievements in this competition are limited so far; (6) the United States could diminish its advantage by implementing the wrong policies; (7) engagement remains possible and desirable with Russia; (8) the United States can help its allies and partners address gray zone threats; and (9) these allies and partners can help the United States prevail in the competition.

The findings and themes suggest several topics for further research, such as conditions within the in-between countries; Baltic states' military and civilian capability gaps; deterrence impacts, improvements, and exercises; the military, political, social, and economic vulnerabilities of U.S. allies and partners; and the fault lines between U.S. adversaries—for instance, between Russia and China.

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