

Perspective

Expert insights on a timely policy issue

The Russian Way of Warfare

A Primer

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his Perspective is intended to serve as a primer that outlines in general terms how the Russian military would conduct combat operations in the event of a high-intensity conflict with a capable peer or near-peer adversary. The discussion here blends how Russian theorists and leaders have written about modern warfare with demonstrated Russian capabilities and history. Russia has shown the ability to tailor its combat operations to specific operational and strategic requirements. The Russian military does not have one standard way of conducting operations; rather, Russia likely has developed a series of contingencies for strategic planning, based on several variables like correlation of forces, military potential of opposing forces, strategic geopolitical context, escalation potential, and others.

An accurate understanding of Russia's way of warfare is important for several reasons. Russia has in recent years carried out substantial reforms to its military forces, which have increased capability in several key areas. Russia's military has improved to the extent that it is now a reliable instrument of national power that can be used in a limited context to achieve vital national interests. Russia's capability has not improved to the extent that Russian leadership would use it against a near-peer adversary in the absence of a clear external threat to the survival of the Russian state. However, these new capabilities provide Russian leadership with more options to assert its positions and support national interests and are worth examining simply to better understand how Russia would fight.

Russia's forces are primarily postured to defend their homeland, particularly key population centers and industry. There is no indication that Russia is seeking a large-scale conflict with a near-peer or peer competitor, and indeed it appears Russian leaders understand the disadvantages Russia faces in the event of a prolonged conflict with an adversary like the North Atlantic Treaty Organization (NATO). Nor is there any indication that the United States, any

Ten Key Characteristics of Russian Warfare

- 1. 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.
- 2. Russia hopes to defend its territory and avoid decisive engagement with a peer or near-peer competitor by fielding defensive systems and strike weapons with extended ranges. These extended ranges would also provide operational advantages to Russian forces conducting offensive operations near its borders.
- 3. Given Russia's conventional weaknesses in a protracted war with a peer or near-peer adversary, it will attempt to use indirect action strategies and asymmetric responses across multiple domains to mitigate perceived imbalances. Russia will attempt to terminate a conflict quickly, using a series of measures that aim to control escalation dynamics.
- 4. The ultimate insurance for Russian escalation management is its arsenal of tactical and strategic nuclear weapons; Russia may threaten to employ or employ its weapons in response to a conventional attack that would undermine the regime's control of the state or threaten Russia's nuclear deterrent.
- 5. Several Russian and Soviet operations have involved a rapid, coordinated *coup de main* attempting to achieve campaign objectives in a very short period of time; this emphasis is likely to remain, especially in preplanned operations.
- 6. 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.
- 7. Conventional and unconventional warfare approaches will likely be mixed in many potential conflict scenarios; special operations forces, paramilitaries, and sympathetic civilians may provide targeting, situational awareness, and some harassment capabilities throughout the battlespace.
- 8. At the operational and tactical levels, Russia will likely focus on disrupting, degrading, or destroying adversary command and control and enemy power projection capabilities through the use of kinetic fires, cyber/electronic warfare, and direct action by maneuver forces.
- 9. Russia has a limited number of long-range conventional precision strike capabilities that could be used against key operational and strategic targets, especially those at fixed, known locations.
- 10. On the ground, Russian tactics will likely reflect a heavy emphasis on massed indirect fires (particularly long-range fires), with the effects of these fires exploited by highly mobile vehicles with substantial direct fire capability.

European state, or China are preparing to launch an attack against Russia, a country that retains a substantial nuclear arsenal and, as will be noted, considerable conventional defenses.

That said, it is not impossible that a conflict could take place, either through misunderstandings or changes in leadership that bring a more aggressive, less risk-averse set of national or military leaders to power in any of these countries. For example, Russia views its efforts to seize Crimea and to destabilize eastern Ukraine as strategically defensive actions: The intent was to preserve the correlation of forces around Russia's borders, to continue to keep Ukraine as a buffer, and to prevent Ukraine becoming too closely aligned with NATO. Clearly, Ukraine would not share the view that Russian actions were defensive in nature. In addition, Russian military theorists retain a strong bias infavor of offensive action. Their view is essentially that at the tactical and operational levels of war, the best defense really is a good offense; if Russian leaders judged that a conflict was inevitable, there would be a strong impulse to seize the initiative and go on the attack.

This perspective seeks to counter some of the misperceptions about how Russia might behave in a future war that could stem from focusing on specific experiences (for example, the unique circumstances of Crimea, Syria, or eastern Ukraine) or dated, Sovietera information. The Russian military is more adaptive than it was in the past; variance in future operations should be anticipated, as Russian military planners implement lessons learned from recent combat experiences. Finally, although a full assessment of modernization and readiness is outside the scope of this document, we note areas where capability shortfalls may limit or prevent Russia from carrying out desired concepts of employment.

Russian operations can take many forms, depending on scope, escalation potential, and desired end results. Overall, however, Russian military operations against a conventional adversary would be characterized by an emphasis on achieving operational objectives $in the \, earliest \, days \, of \, a \, campaign \, through \, the \, coordinated \, use \, of \,$ forces across all the relevant domains of warfare. There would be a concentrated effort to achieve surprise (if possible), leverage superiority in firepower, seize objectives using highly mobile forces, and subsequently terminate a conflict before an adversary with superior long-term potential military power could bring the full weight of a response to bear. Russia's military is postured for defense but capable of generating considerable offensive power near some of its borders, and it has some capabilities for limited out-of-area operations. Russia is establishing a layered conventional theater strike capability, and its conventional long-range strike capability has provided at least a limited ability to threaten targets across intercontinental distances.

A Note on Sources

Our observations draw from a review of relevant Russian military and national security documents, including doctrine; policy statements by senior Russian national security and military leaders over the last ten years; a review of writings by leading Western experts on select Russian military capabilities; recent strategic Russian military exercises; a review of Russian operations from recent engagements in Georgia (2008) and Ukraine (2014–present); and Russian thinking on strategic stability and nuclear deterrence. This work was further informed by discussions with subject-matter experts, including at a July 2016 workshop in RAND's Washington, D.C. office. The authors reviewed publicly available sources that outline

the Russian order of battle and unit composition to inform our judgments. The comparisons of U.S. and NATO indirect fire capabilities to those of Russia in the following graphics are derived from a series of RAND wargames and analysis.¹

Strategic Defensive Posture

Russian strategists, concerned about the capability of an advanced military adversary to carry out a large-scale conventional aerospace campaign against the Russian heartland, focus on preserving Russian influence in buffer states along its borders and on reinforcing a series of defensive bulwarks. This posture would buy Russia's leaders space and time to mobilize the state in the event of a large-scale war and to supplement their nuclear deterrent in assuring Russian territorial integrity.

Russia's military posture, capabilities, training exercises, and force structure are consistent with its declared doctrine that its military exists to defend Russia, rather than to project power globally. Russia's historical experience of repeated invasions over the centuries has created a powerful legacy that shapes its defense and foreign policy. Its leaders expect to have privileged interests in the smaller states on Russia's borders; they maintain defensive treaty agreements with several of the former Soviet republics and have military bases in some of them. Owing in part to interpretation of how Western nations have conducted conventional warfare since 1991 and to concerns of a massed conventional aerospace attack on Russia, Russia has invested heavily in air defenses and possesses one of the most advanced and extensive air defense networks in the world.

Russian strategies against a peer or near-peer competitor also aim to disrupt power projection capabilities that can threaten Russia's strategic assets or critical infrastructure, such as carrier aviation, land-attack or ballistic missile defense-capable naval platforms, foreign bases, and certain air assets (Khryapin, Kalinkin, and Matvichuk, 2015). Russia has air, naval, and ground-based systems that can fire antiship cruise missiles, long-range land attack cruise missiles, and tactical ballistic missiles. Russian strategy and doctrinal writing envisions the coordinated use of ground, naval, and aerospace forces, as well as long-range precision strike and asymmetric activities, against an adversary's forces. Russian strategists believe aerospace will be the primary domain in modern warfare.³

Russian antiaccess/area denial capabilities can threaten forces close to Russia's western and southern borders with integrated air defenses, cruise and ballistic missiles, and ground-based indirect fires. These assets provide Russian leaders some ability to attack some fixed targets and key nodes with precision in the operational and strategic depths of potential adversaries. While Russia could disrupt the deployment of peer or near-peer enemy air, naval, or ground forces to an area of operations near Russia during early phases of conflict, Russia probably lacks the numbers of missiles and platforms necessary to halt or prevent this process over time, based on RAND analysis and wargaming.

Russian investments in air and naval forces have included a steady focus on improved conventional capabilities and long-range strike systems, which have recently been demonstrated in operations in Syria. In addition to various missile systems and strike capabilities, the Russian land forces have, over the course of the last decade, transitioned from a primarily mobilization-based force with large, low-readiness cadre formations to a smaller, permanent-readiness—based force. This force trains to provide combined-arms ground capabilities that can mass quickly within Russia in response to a state or nonstate actor. Between the Ground Forces,

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the Airborne Troops (in Russian, *Vozdushno-Desantnye Voiska*, or VDV), and the Naval Infantry, Russia has around 60 brigade- or regimental-sized formations. Most of these can provide one to two battalion tactical groups (BTGs) of professional (contract) soldiers. These BTGs are kept at a relatively high level of readiness, while the remainder of the unit trains conscripts on 12-month cycles.

Following the 2009 "New Look" reforms and through roughly 2013, the brigade was held as the optimal unit formation, but more recently Russian leaders have made statements about reforming a number of divisions in the Western and Southern Military Districts. Ground Forces reforms envisioned a modular force with well-equipped battalions that could be used against a variety of adversaries, from the nonstate groups that Russia anticipates as its most likely opponents to conventional military forces requiring large operations. 4The focus on battalion-sized formations enables combined-arms training for capabilities that are useful for either contingency.

Not surprisingly, Russia's reforms have augmented its military's offensive potential. Long-range surface-to-air missiles deployed in Kaliningrad or near St. Petersburg are positioned to deter or prevent attacks on Russia but, due to their range, can also cover airspace over the Baltic states, the Baltic Sea, and northern Poland. If used during an offensive, these systems would convey operational

advantages to advancing Russian air and ground forces. However, Russia's most capable defensive systems are concentrated in the west; Russia's other borders do not benefit from the same density of defenses. Finally, rapidly generated forces, intended to respond to instability along Russia's periphery, could potentially overwhelm most of Russia's neighbors in an offensive before an effective response could be mounted.

An important caveat is that Russian military behavior will continue to be driven by the views of its most senior leaders, and their views are influenced by contextual activities in the economic, diplomatic, informational, and military domains. They may misread cues, see or exaggerate threats to Russia, react to perceived provocations, and potentially preempt when they judge conflict to be inevitable. So while Russia's overall strategic orientation is roughly akin to a defensive crouch, defensive reactions could well take a very offensive character at the direction of Russian leadership.

The Potential for Nuclear Escalation

According to Russia's current (2014) military doctrine,

Russia reserves the right to use nuclear weapons in response to a use of nuclear or other weapons of mass destruction against her and (or) her allies, and

in a case of an aggression against her with conventional weapons that would put in danger the very existence of the state.⁵

Russia has invested considerable sums in developing and fielding long-range conventional strike weapons since the mid-2000s to provide Russian leadership with a buffer against reaching the nuclear threshold—a set of conventional escalatory options that can achieve strategic effects without resorting to nuclear weapons. The precise issues that will cause Russian leaders to believe they face a danger to "the very existence of the state" depend on context, but Russian doctrine does provide some clues.

Russia is likely to consider nuclear responses to nonnuclear attacks that it believes present a grave threat to its territorial integrity and sovereignty; continuity of government; and the viability of its strategic nuclear deterrent. The destruction of integrated air defenses arrayed around Russia's heartland or in Kaliningrad, in conjunction with other critical losses sustained by Russian conventional forces during conflict, could also be considered an existential threat to the state.

Russia will continue to prioritize its nuclear deterrent posture and is working to enhance its early warning capabilities. Russia may feel its silo-based intercontinental ballistic missiles are relatively more vulnerable to first strikes than mobile launchers and

submarines. Moreover, Russia's ability to detect a launch from space has deteriorated, as the Soviet-era satellite constellations providing warning went offline by 2015. Russia launched the first satellite of a new space-based early warning system in 2015 and aims to complete this constellation after 2020 ("GLONASS vs. GPS: An Aerospace Forces Colonel on the Status of Russia's Military Space Program," 2016). In the interim, Russia will rely on legacy and new ground-based early warning radar stations to cover gaps. Reduced warning time or Russian fears of a disarming U.S. first strike may lead to a less-stable nuclear deterrence relationship.

Planning and Executing Operations

Russian operations will show a high degree of coordination across a wide range of military units, using deception and simultaneity to achieve objectives quickly and minimize periods of vulnerability to an adversary's most dangerous capabilities. This will be most apparent in operations conducted near Russia's borders that benefit from advance planning, and probably much less apparent when Russian units are forced to improvise or react to unanticipated threats.

Russia is clearly disadvantaged in both numbers and economic power in a conventional long-term contest with the United States, European NATO countries, or China. If Russian leaders believed military action against Russia were imminent, they might feel

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compelled to act preemptively. Russia would most likely seek to achieve its objectives quickly and then attempt to terminate the conflict on the best possible terms. The longer a conflict drags on, the more Russia would be at a disadvantage, especially after the initial weeks or months. The ground-based defenses against air attack can eventually be exhausted or overwhelmed, and over time Russian local numerical superiority would dwindle if a large country such as China or a bloc like NATO marshals its full strength for a protracted war. It is therefore highly likely that Russian operations would feature a swift *coup de main* and then transition to defense and consolidation of gains.

The Russian seizure of Crimea is only the most recent example of the successful employment by Russian (or, previously, Soviet) forces of a relatively small number of elite forces to carry out a lightning campaign to quickly take down an overmatched opponent. In cases such as Czechoslovakia in 1968 and Afghanistan in 1979, the outcome was determined not only in terms of correlation-of-forces overmatch, but also in terms of speed and surprise. The Russians quickly overwhelmed the defenders, leaving them minimal time to respond. In 2008, the Russians brought overwhelming force to bear in Georgia in a short amount of time, but operational coordination was a publicly discussed flaw of that operation.

If pressed to carry out sustained combat operations, Russian forces would operate in a few distinctive ways. Russian commanders will place a high priority on disrupting and destroying an enemy's headquarters and communications capabilities. This will take several complementary forms:

 a deliberate effort to identify and destroy (through kinetic means) or neutralize (through electronic or cyber means) the adversary's command and control systems

- the practice of *maskirovka*, which involves concealment of forces and intentions, as well as the use of decoys and deception to misdirect the adversary
- a high rate of advance to minimize the time the adversary has to identify the primary Russian course of action and develop an appropriate response.

Joint force integration is a priority for Russian development. In 2010, Russia's new joint strategic commands replaced the old-style military districts and gave commanders operational control over ground, aerospace, and naval forces, much like U.S. combatant commands. As of 2017, the Russian military is in its seventh year of true joint force command and is gaining operational experience through recent joint operations abroad. Russia is working toward the ultimate goal of a unified "information space." The trial by combat of these capabilities has taken place in Ukraine and Syria; although they reflect substantial improvements in combat capability compared with what they demonstrated in the 2008 war with Georgia, they have not yet been tested against a capable military or in large-scale operations.

Russian writings on the conduct of operations and tactical engagements emphasize the importance of the long-range fires contest. Russia's military can employ overwhelming firepower against any of the country's neighbors, and Russia has invested heavily in intelligence, surveillance, and reconnaissance (ISR) capabilities to mass fires quickly and effectively. Russia's strategic, operational, and tactical air defenses would pose challenges to its adversaries' air operations and joint air-ground integration. Russian ground forces are typically heavily defended with air defense systems rather than by air support; in a situation of mutual air denial, Russian ground

units would most likely enjoy a substantial advantage derived from their numerical superiority in ground-based fire support. Again, Russian views are consistent: They believe the advantage in modern warfare goes to the side that can gain and sustain fire superiority over the adversary, and in some scenarios they would likely feel compelled to attack to secure that advantage.

Russian forces' continued reliance on a small but elite set of rapid reaction forces is an additional unique feature of the way they carry out operations that emphasize speed and maneuver. The VDV, *Spetsnaz* (special forces), and Naval Infantry regiments and brigades are highly mobile and able to put light mechanized forces in the field and conduct combined-arms maneuver. The VDV has had important (and frequently central) roles in virtually every major Soviet or Russian operation since World War II. It is the core of a "fire brigade" capability with a more direct command and control chain to military leadership than the Ground Forces.

The case of Ukraine in March 2014 is instructive. In the span of a few weeks, elements of high-readiness Russian Ground Forces and VDV units massed near the northern and eastern borders of Ukraine. According to a report by Igor Sutyagin of the Royal

Russian views are consistent: They believe the advantage in modern warfare goes to the side that can gain and sustain fire superiority over the adversary, and in some scenarios they would likely feel compelled to attack to secure that advantage. United Studies Institute, Russia massed up to 48,000 combat troops around Ukraine in March and April 2014; in terms of units committed, a disproportionate number were from the VDV and *Spetsnaz*—lighter units than those of the more tank-heavy Ground Forces, but still equipped with armored vehicles (Sutyagin and Clarke, 2014).

Russian naval capability would serve important supporting roles in a conventional conflict, such as providing bastion defense, launching long-range precision strike weapons, and conducting antisurface and antisubmarine warfare. Russia's surface and submarine fleet now regularly conducts out-of-area operations, but given the strain on the limited number of platforms, these peacetime deployments will be focused on the most strategically valuable areas, such as the eastern Mediterranean, Arctic, portions of the Atlantic, and the Black Sea. The Russian navy has blue-water capable ships and submarines that could launch cruise and ballistic missiles, although this capability is limited to a small percentage of platforms for the foreseeable future. Aging platforms, delays in procurement, and uneven performance across the fleets are persistent challenges constraining naval performance.

Learning from its embarrassing losses in Georgia in 2008, the Russian Aerospace Forces have maintained a high operational tempo with longer flight hours over the last several years, particularly during operations in Syria. They are also practicing missions like aerial refueling, nighttime operations, and precision strikes ("Fighter Pilots in Western Military District Complete Main Stage of Ladoga-2016 Exercise," 2016). Russian long-range conventional strike assets like the Kh-101 enable Russia to launch at least limited conventional strikes against targets anywhere within thousands of kilometers of Russia. Russian Aerospace Forces' likely missions in

a high-intensity conflict would include reconnaissance, combat air patrols, ground strikes, providing air support to advancing ground forces if possible, and engaging in air-to-air combat.

Irregular Forces Will Be Present on the Battlefield

Much has been written in recent years on Russian asymmetric capabilities in light of the operations that led to the seizure and annexation of Crimea and the destabilization of eastern Ukraine in the vicinity of Donetsk and Luhansk. Russian use of *Spetsnaz*, intelligence services, and paramilitaries could be an important element of a conflict in different ways that may not be easy to distinguish.

- Unconventional warfare. Russia might attempt to carry out an operation where the main effort is a special operations forces (SOF)-led set of missions, as in the initial stages of eastern Ukraine and in Crimea. Conventional forces would still have a role in providing support to SOF units engaged in activities and in deterring a large-scale response.
- Precursor to invasion. The use of paramilitaries, SOF, and unmarked units may be seen in the early stages of a conventional attack as well. *Spetsnaz* could perform their traditional strategic reconnaissance and direct action missions as part of deliberate preparations for an offensive operation. Should the SOF element of the campaign face defeat by an adversary's military or security forces, Russian conventional military units might intervene (as in August 2014, when Russian separatists in eastern Ukraine were on the verge of defeat by pro-Ukrainian forces). Russia could use similar tactics against a peer or nearpeer adversary, although the operation would require more finesse and would pose a greater escalation risk.

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The broader point is that irregular forces will likely be present throughout the battlespace, providing information about adversary forces and potentially operating against high-value targets.

Tactics: Hit Hard, Move Fast

Russian tactics will continue to heavily emphasize gaining and maintaining fire superiority over an adversary; leveraging improved ISR capabilities and a wide range of fires platforms; and using speed, surprise, and integrated combined arms in maneuver forces to disrupt and overwhelm enemies once encountered.

Russian ground units train to conduct operations against irregular adversaries as well as to conduct high-intensity combat against the military forces of a modern state. In practice, they have retained many conventional combat capabilities, such as ground-based air defenses, electronic warfare, and particularly indirect fires, that the U.S. military chose to deemphasize or remove from the force to optimize forces for the conflicts in Iraq and Afghanistan.

Disjointed Battle

Russian forces would aim to disorient the adversary and prevent it from operating in its preferred fashion. As mentioned earlier, many of their efforts—including the emphasis on deception, electronic warfare, and strikes against command and communications—are

intended to disrupt adversaries and slow their ability to respond to developments on the battlefield. This plays into the Russian emphasis on layered air defenses and ground-based fires.

As depicted in Figure 1, the combination of a layered integrated air defense system (IADS) and a variety of ground-based indirect fires systems is intended to pose a significant joint and combined-arms integration challenge to adversaries. The IADS complicates the ability of an adversary to employ air-delivered fires against Russian forces, and the considerable artillery and missile forces available are intended to allow Russia to gain and leverage superiority in fires on the ground.

The employment of indirect fires en masse at the tactical level is one of the signature characteristics of Russian ground forces. A typical Western maneuver formation might have a single artillery or indirect fire subunit for each unit — for example, a U.S. Army brigade combat team has an organic artillery battalion — but Russian combined arms (tank or motor rifle) brigades have smaller

maneuver elements and more numerous fire support elements. A motor rifle brigade, consisting of three motor rifle battalions and a tank battalion, will also frequently have two self-propelled artillery battalions, a rocket artillery battalion, and an antitank artillery battalion (with primarily direct fire systems) before it is augmented with additional artillery support from its parent formation. The main effort of a major Russian offensive operation likely would have maneuver units supported by an equal or greater number of artillery units. They will use large quantities of cluster munitions and artillery-delivered mines.

Figure 2 represents RAND's assessment of the typical volume of indirect fires available to a U.S. Armored Brigade Combat Team, compared with that of a Russian motorized rifle brigade. On a one-for-one basis, U.S. Army ground units would face an adversary with quantitatively superior artillery that had a broader variety of munitions available and the ability to strike at long ranges. This Russian advantage would be compounded by Russia's likely numerical superi-

Figure 1. Russian Air Defenses and Ground-Based Fires

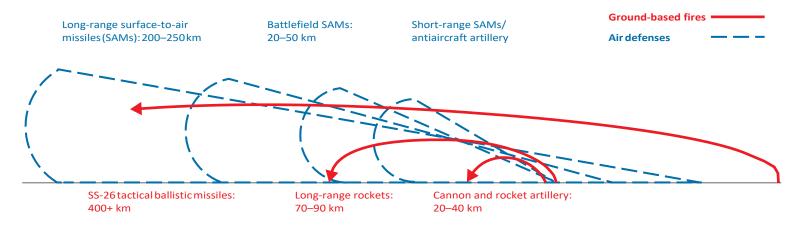
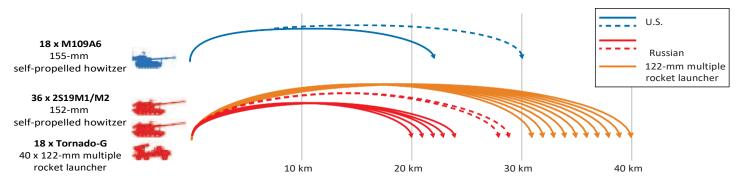


Figure 2. Indirect Fires Brigade-to-Brigade Comparison



NOTE: This comparison graphic is normalized to the U.S. howitzers and compares ranges and maximum rates of fire for one minute of firing. Solid lines represent standard high-explosive ammunition; dotted lines represent extended-range high-explosive rounds.

ority in the early stages of a crisis, and the large numbers of army and military district—level missile and artillery troops in Russia's force structure. These fire advantages are greatest while operating from a position of relative safety, and they begin to recede if adversaries can break through a contested or denied air environment and conduct air strikes, as depicted in Figure 1.

The techniques that Russian units employ at the operational level will also have an influence on the tactical fight. Russian units will not seek a parity confrontation against a peer-competitor with superior training on a unit-by-unit basis. Rather, they will employ maneuvers to find and fix an adversary and use fires to destroy it. Blocking tactics (*blokirovanie*) will box in an enemy force to facilitate its destruction by massed artillery fire. A variety of sensors, including ground-based battlefield surveillance radars, electronic warfare support, and tactical unmanned aerial systems, will be employed to isolate and target adversaries, especially headquarters units and concentrations of combat power.

Many of the above approaches describe how Russian military leaders would attempt to employ their available forces, but there is considerable variance among units in their ability to carry out those approaches. Some units have been shown to be high quality, such as the all-volunteer Airborne Forces, certain units in the Ground Forces, and some of the Aerospace Forces that have been carrying out missions in Syria. Other units are equipped with older weapons and have a higher percentage of conscripts serving 12-month terms; not surprisingly, they may struggle to achieve the same level of performance. The extent to which the Russian military as a whole can scale up the capabilities seen in recent conflicts is an open question. Further, in contrast with the considerable emphasis that the Soviet Army placed on mobilization of the entire society for war, Russia's ability to count on large reserves to back up its ready forces is limited and will probably remain so for some time.

Finally, it is worth noting that Russian units will not be expected to follow the same rules in combat as those of Western

countries. Their rules of engagement and potentially their authorities to employ capabilities like offensive cyber tools will be different and likely more permissive to better empower their soldiers to gain an advantage on the battlefield.

Conclusions

Although clearly influenced by their Soviet ancestry, the Armed Forces of the Russian Federation have evolved considerably to reflect new realities facing Russia's defense leadership. Russia no longer has massive manpower advantages over its potential adver-

saries, nor can it trade space for time in light of the speed, range, and hitting power of modern aerial-delivered munitions. Facing a future in which their traditional strengths are absent or less useful, Russia's military leaders have adapted in ways designed to enable an effective defense of their homeland and, if required, to permit limited offensive operations around their periphery. The Russian armed forces are not like the Soviet Army insize, depth, or global ideological aspirations. However, Russian forces have demonstrated an increasing array of conventional capabilities that would challenge adversaries at the tactical and operational levels of war.

Notes

¹For more information, see Michael Johnson and David Shlapak, *Reinforcing Deterrence on NATO's Eastern Flank: Wargaming the Defense of the Baltics*, Santa Monica, Calif.: RAND Corporation, RR-1253-A, 2016.

²In accordance with its obligations under the Intermediate-Range Nuclear Forces Treaty, Russia is prohibited from fielding ground-launched missile systems with ranges between 500 and 5,500 km. Additionally, see "Dialogue with NATO Possible Only on Equal Basis — Russian Defense Ministry," Moscow Interfax, February 5, 2016; and "Russia Responds to Unrestricted Development of Ballistic Missile Defenses," *Rossiskaya Gazeta*, May 29, 2015.

³Russia merged its air, strategic air and missile defense, and space forces into the Aerospace Forces (in Russian, *Vozdushno-Kosmicheskiye Sily*, or VKS) in August 2015. In 2015, Defense Ministry Army General Sergey Shoygu said that the VKS was created because "their formation is dictated by the shift in the center of gravity of armed struggle into the aerospace sphere." See "Russian Defense Ministry Army General Sergey Shoygu Holds Regular Teleconference," Ministry of Defense of the Russian Federation, August 3, 2015.

⁴Then-Chief of the General Staff Nikolay Makarov stated that lessons learned from the conflict with Georgia led to the implementation of brigades as a ground forces structure, and the creation of a battalion tactical group within each brigade kept at highest readiness. "Demobilization of the Paper Army," *Moscow Gazeta*, June 8, 2009.

⁵Embassy of the Russian Federation to the United Kingdom of Great Britain and Ireland, "The Military Doctrine of the Russian Federation," December 25, 2014. Section 20 states that "Prevention of a nuclear military conflict as well as any other military conflict has been made the basis of Russian Federation military policy."

 $^6 Section 14. A. bof the military doctrine includes the following among the "main military threats" to the Russian Federation:$

obstruction of the operation of state and military command and control systems of the Russian Federation; disruption of the functioning of its strategic nuclear forces, missile attack warning system, spacesurveillance system, nuclear weapon storage facilities, nuclear power engineering, the nuclear, chemical, pharmaceutical, and medical industry, and other potentially dangerous facilities (Embassy of the Russian Federation to the United Kingdom of Great Britain and Ireland, 2014).

Section 16 states that "Nuclear weapons will remain an important factor in preventing the outbreak of nuclear military conflicts and conventional military

conflicts (large-scale war, regional war)." Section 32a states that some of the main missions of the military are the protection of sovereignty and territorial integrity and maintaining Russia's nuclear and nonnuclear deterrence capabilities at appropriate readiness levels.

⁷See, for example, "Russia Lost All its Early-Warning Satellites," Russian Strategic Nuclear Forces, February 11, 2015.

8"Defense Minister Army General Sergey Shoygu Participated in the Work of the First Interdepartmental Conference on Information Interaction," Ministry of Defense of the Russian Federation website, November 19, 2015. Russia envisions a "unified information space" for its military forces and select parts of the Russian interagency.

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About This Perspective

Russia has demonstrated its military competence and operational flexibility through operations in Crimea, eastern Ukraine, and Syria. Recent Russian actions have highlighted the need for a more comprehensive understanding of Russian military capabilities and operations. This perspective provides a primer on how Russia's military might fight in the event of a major conflict against a peer or near-peer adversary. It is intended to contribute to a discussion within the defense community that leads to a sounder understanding of how Russia could use force in support of political objectives.

This Perspective is a product of the "U.S.-Russia Scorecard" study. The larger study is intended to inform the Army and the larger defense community on the military potential of the Russian Federation to challenge the United States in key mission areas. It will provide an assessment of the relative capabilities of the United States, our North Atlantic Treaty Organization allies, and Russia, along with a set of implications and recommendations for U.S. policymakers.

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