

ASSESSING RUSSIA'S REORGANIZED AND REARMED MILITARY

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Recent Western assessments of Russia's renewed military power have led to a wide range of differing conclusions and, taken together, provide a mixed and confusing picture of the scale and nature of the threat. Impressive capabilities demonstrated in Ukraine and Syria have given rise to concern that Western armed forces may find it difficult to cope with an operating environment dominated by new Russian weapons systems for which they have neglected to adopt countermeasures. But at the same time, a number of veteran scholars of Russian military affairs argue that the power of the current Russian military is commonly overestimated, suggesting that it is hostage to many problems inherited from its traumatic post-Soviet degeneration, critically challenged by overstretch, technologically backward, or all three.

The answer lies in between. Russia's reorganized and rearmed Armed Forces are neither invincible nor still broken and incapable. Two points are beyond argument: First, in terms of equipment, experience, attitude, confidence, and more, the Russian military is a radically different force from the one that began the process of transformation in 2008. Second, change is still taking place. Snapshots of Russia's capability displayed in Ukraine and Syria tend to conceal ongoing developments; the true capability of the Russian military is not static but a rapidly developing phenomenon.

As such, this broad overview of Russia's military capability in 2017 should not be taken as a definitive description but rather an indicator of trends. Individual sections discuss a range of current factors affecting overall capability that are still in flux, including issues of affordability, manning, organizational development, and the implementation of lessons learned from Ukraine and Syria. This white paper also considers

short-term timelines of opportunities versus threats—perceived or actual—for the Russian military, before concluding with a number of broad recommendations.

TRANSFORMATION

The extensive and painful history of Russia's military reorganization under former defense minister Anatoliy Serdyukov and its continuation and revision under current Defense Minister Sergey Shoygu has been described in detail and will not be repeated here.¹ The key question in 2017 is what effect this reorganization, and the accompanying program of massive investment in rearmament and reequipment, has had on Russia's capability to engage and prevail in conflict.

Both the equipment and organizational aspects of the Russian military's current development present challenges. Substantial progress is reported toward Russia's goal of reaching set

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percentages of modern equipment in service,² but the stated target of 70 percent in the Ground Forces by 2020 is flexible in the absence of any consistent definition of what counts as “modern.” As recently as 2015, an informed Russian commentator could cast doubt on the effectiveness of the transformation and reequipment program overall, suggesting that despite a higher standard of training and command, Russia’s Armed Forces were not ready for large-scale conflict because “today’s Russian army is not that qualitatively different from its 1991-model Soviet predecessor and does not really have that many of the latest armaments that meet the high demands of the twenty-first century.”³

Furthermore, continuing significant structural changes in the Ground Forces during 2016 mean that any assessment of this area describes a work in progress. The new order of battle that lay at the heart of Serdyukov’s initial reforms has been tested and rejected by both the Ground Forces and the Air Force,⁴ but the final shape of these forces is still forming and appears to be under adjustment based on experience from current operations in Ukraine and Syria.

Nevertheless, the overall direction of travel has been discernible since the stabilization of reform efforts in late 2011 and early 2012.⁵ After much trial and error, the driving aim of creating “permanent readiness units” seems near completion in the form of battalion tactical groups (BTGs) based on larger formations. The defense industry has overcome its initial (and expensive) struggles to restart production despite being flooded with cash, and new equipment is arriving in appreciable and more or less predictable quantities.

The date set for the completion of Russia’s military transformation was 2020, which also served as the planning horizon for a number of key strategic documents adopted at the same time, such as the National Security Strategy, the Maritime Doctrine, and others. But the fundamental aim of restructuring the force—from one designed for protracted large-scale conventional military conflict in the 1980s into a more compact, high-technology military to engage in swift and intense securing of operational aims in the twenty-first century—appears already close to completion.

Russian Chief of the General Staff Valeriy Gerasimov’s February 2013 essay that came to be widely and misleadingly known outside Russia as the Gerasimov doctrine was a call for a study of the developing nature of warfare, to prepare for future threats and conflicts. Russia’s senior military thinkers continue to debate the changing character of war, and a major conference on the topic is scheduled for August 2017. For the time being, despite focus in the West on the “hybrid” and “nonlinear” aspects of state competition, the conclusion in Russia appears to be that the importance of high-intensity warfare remains undiminished, and that strategic deterrence with nuclear weapons and updated air and missile assets, supported by strong and capable land forces, will continue to play a fundamental role in securing state interests.⁶

TRAINING AND LESSONS LEARNED

Russian military deployments to the Ukrainian border in mid-2014 demonstrated substantial logistical achievements, honed by several years of practicing large-scale, long-distance deployments. Russia showed its ability to maintain large formations in the field after rapid deployments and sustain them over extended periods with little obvious degradation in performance. But as was observed at the time, this, like the performance of Russian troops involved in the seizure of Crimea, should not lead to an overestimation of Russian military capabilities. In particular, set-piece exercises and snap inspections might have developed Russia’s ability to move and sustain troops but may have had less impact on their actual combat capability.

Since that time, however, Russia has been making the most of the training opportunities provided by operations in Ukraine and Syria. From a very early stage in the Ukraine conflict, Russia was observed to be carrying out a roulement, or rolling deployment, of troops from across the whole of its Armed Forces to the Ukrainian border.⁷ Similarly, in Syria, a large number of Russian servicemen were deployed on short tours of three to four months, to maximize exposure to operating conditions. According to one Russian general, it was cheaper to carry out training under real conditions in Syria by shipping men and equipment through the Bosphorus

than to engage in large-scale exercises on Russian territory, with the enormous distances required to be covered.

The result is that a significant proportion of Russia's Ground Forces and Air Force have now been exposed to operational conditions over an extended period, if not to actual combat. These ongoing roulements are providing Russian troops with practical experience in a much more effective manner than exercises, and their effect in combination with the continuing flow of new weapons systems and equipment can be assumed to provide substantial increases in war-fighting capability.

Ukraine and Syria provide different, but complementary, training and testing opportunities for equipment, tactics, and organizational structures. Ukraine, in particular, has provided Russia with valuable experience fighting a contemporary enemy of comparable capability, in combat involving heavy use of main battle tanks, infantry fighting vehicles, and unmanned aerial vehicles (UAVs). Defensive aids and reactive armor have been tested in action against modern anti-armor weapons.

Meanwhile, Syria has likewise been a testing ground for "[electronic warfare] systems, UAVs, new communications systems, antitank weapon systems, and much else."⁸ But it has also offered the opportunity to trial a wide array of longer-range weapons and missiles, with heavy emphasis on the use and testing of standoff weapons from extreme ranges, including from the Caspian and Mediterranean Seas and delivered by air from the eastern and western approaches to Syria.⁹ Other learning opportunities unique to Syria include air-ground coordination, interaction with indigenous forces, and, in the air, the chance to engage in brinkmanship and study closely the capabilities and tactics of aircraft from NATO nations and Israel while supported by advanced land- and sea-based Russian air defense systems. Finally, on the basis of operations in and around Syria, Russia has shown pride in its demonstrated ability to deploy personnel, equipment, and stores over long distances swiftly and without detection.¹⁰

According to Gerasimov, "today [Russia is] acquiring priceless combat experience in Syria. It is essential for this to be analyzed in the branches of service and the combat arms at both the operational and tactical levels, and for a scientific conference

to be held on the results of the military operations."¹¹ A series of public and closed conferences in Moscow from the end of 2016 to early 2017 did precisely this, examining the shortcomings of arms and equipment in operational use in Syria and looking at optimization of organization and logistics for foreign deployments.¹² These assessments are expected to lead directly to increased production of precision-guided munitions, further development of capabilities for concealed deployment of forces, and the establishment of separate aviation units operating UAVs. But lessons learned are already being spread throughout the Armed Forces, accompanied by a willingness to test the performance of officers and remove those who do not meet operational standards.¹³

MANPOWER AND OVERSTRETCH

The alternative view of Russia's roulement of servicemen from remote parts of the country to the Ukrainian border holds that this is not deliberate policy but a sign of insufficient manpower to sustain the commitment.

Experienced researchers including Igor Sutyagin and Aleksandr Golts argue consistently that the number of servicemen available severely limits Russia's options, and that overstretch remains a problem.¹⁴ They also observe that Russia's plan to establish a number of new Ground Forces divisions, as well as other new formations, is inconsistent with the Ground Forces' substantial undermanning problem and will lead to the hollowing out of existing formations.

The viability of the new (and constantly evolving) system for recalling reservists has also been called into question, with implications for Russia's ability to sustain manpower during protracted conflict. Roger McDermott suggests that "Russia's Armed Forces still confront a variety of real challenges, ranging from military manpower issues to military culture and education producing a system where individual initiative is a rarity. . . . Many of these challenges serve to mitigate or limit Russian military capability, while the defense ministry PR serves the opposite purpose: to heighten, exaggerate and spread fear."¹⁵ As a pertinent example of this syndrome, impressive figures cited for total numbers of servicemen involved in Russia's snap exercises should not be taken at

face value; involvement can be notional or on paper, rather than meaning actual mobilization of the units concerned.

Recruiting sufficient individuals to fill posts in the Armed Forces has been a consistent challenge for Russia. The start of the transformation process in 2008 coincided with the nadir of Russia's demographic crisis and had to contend with the Armed Forces' appalling reputation as an employer over the previous fifteen years. The precise impact of manning shortfalls is hard to quantify, because official figures on recruitment and retention are consistent only in their unreliability.¹⁶ An estimate based on compiling official statements in early 2015 put Russia's total number of servicemen at 776,000, or approximately 78 percent of the intended target of 1 million men in uniform.¹⁷ According to Shoygu, by the end of that year, Armed Forces manning had recovered to 92 percent of posts.¹⁸ While this rapid an increase seems improbable, it is true that the recruitment crisis has eased significantly. Professional military service, especially now that it is relatively well paid, is an attractive career option in Russia's current economic crisis; even by unofficial counts, the number of professional soldiers (*kontraktniki*) is now well in excess of the number of conscripts.

Nevertheless, the aftershocks of the personnel upheaval that accompanied the transformation process are still being felt. The problem of surplus officers being used as a manpower sump to fill the deficit in qualified noncommissioned officers had reportedly been resolved by the end of 2016,¹⁹ but the glut of officers has apparently been replaced by acute shortages, as radical adjustments to training intakes made under Serdyukov feed through to numbers of junior officers arriving in service.²⁰

Overstretch can translate into visible losses, as in mid-2015 when intensive use of aircraft in operations and training combined with a long-standing deficit of fully trained pilots to produce a spate of aircraft accidents.²¹ Contrary to expectations that this situation would worsen, by the end of 2016 it appeared to have been resolved. With the Russian Air Force canceling or reducing commitments to nonoperational events such as air shows and flypasts because of pressure on aircraft and pilots due to ongoing operations in Syria, the noncombat accident rate has fallen dramatically. This suggests either that reporting on accidents is subjected to new and improbably

effective censorship or that systems and personnel have now shaken down and adjusted to the high operational tempo.

The cautions and caveats regarding manpower may be entirely correct, but at the same time, they may not matter. Similar to comparisons of overall military and economic power between Russia and NATO, these considerations are important when assessing the possible outcome of extended conflict, but far less relevant to a brief military adventure. Here, Russia's demonstrated ability to swiftly concentrate sufficient numbers of military assets for the immediate task at hand, and Russia's far greater willingness than its adversaries to resort to military force, would be much more relevant.

There is a parallel here with discussions of nonstrategic nuclear weapons—another field where there is intense debate as to the real quantity of Russian inventory but where quantity is of secondary importance. That is both because the available numbers far outstrip what is usable in the European theater and because the doctrine for their use provides Russia with means of escalation or de-escalation to which Western allies have no response.²²

AFFORDABILITY

Along with assessments of military capability overall, there are widely varying assessments of whether and for how long Russia can sustain current levels of spending on its Armed Forces in the adverse economic conditions created by low energy prices and exacerbated by Western sanctions.²³ Persistent requests by the Ministry of Finance to rein in defense spending continue,²⁴ in the context of long-term budget planning intended to reduce the deficit from almost 4 percent of GDP in 2016 to just over 1 percent in 2019.²⁵

In this context, actual military expenditure could decline despite stated Russian priorities, give or take budgetary quirks like a Ministry of Defense underspend in 2015.²⁶ But reporting of reductions in defense expenditure should be treated with caution. The intricacy of Russian defense budgeting is such that even reliable sources can on occasion leap to entirely the wrong conclusions.²⁷ Even if a contraction does occur, this should not be interpreted solely as a result of economic constraint.

Any visible reduction in spending may not be primarily caused by economic difficulties or sanctions, but may be a natural readjustment following a period of intense investment in procurement; the rate of growth of spending on the state defense order can be relaxed, with a transition to a more normal, lower annual rate of new armaments procurement.²⁸

Russia is attempting to maintain levels of investment to guarantee that the Armed Forces are functional and sufficiently stocked with relatively up-to-date equipment and weapons systems, which may mean that current spending is sustainable for longer than commonly thought, as capital projects are reduced to favor operational costs and stockpiling capabilities. Russia's ongoing combat operations also impose substantial costs, but their effect on other areas of defense spending is hard to judge. In keeping with Russia's approach to the Syria conflict as partly an opportunity to train and test the personnel and equipment of its new Armed Forces, President Vladimir Putin stated in March 2016 that funding for those operations came from the budget for training and exercises.²⁹ Overall, detailed studies of military expenditure conclude that modernization of the Armed Forces continues to be a high priority, and funding of the state armaments program will continue.³⁰

In addition, there is an argument that sanctions have increased Russia's resilience and provided an essential stimulus for domestic industry.³¹ This view is supported by Julian Cooper, emeritus professor of Russian economic studies at the University of Birmingham, who notes that "paradoxically [sanctions] have served to push the military and defence industry to search for alternative ways of obtaining militarily satisfactory outcomes."³² If this is the case, the effect is unlikely to have been spread evenly across all arms of service with their widely varying technological requirements; according to one assessment, naval development in particular has been impacted by a lack of access to technology and finance.³³

Excessive spending on the military may indeed be unsustainable in the long term.³⁴ After all, this was a major contributor to state collapse in Russia at least twice during the twentieth century (in 1991, 1917, and, more debatably, 1905) and routinely served as the catalyst for major social upheaval in previous centuries. But that does not alter the fact that in

the short and medium terms, Russia is purchasing for itself substantial increases in capability. For now, respectable levels of new equipment types are being delivered, especially in the Western Military District, with rates of delivery continuing to increase—even though the burst of activity toward the end of 2016 led one commentator to suggest that "Russian defense industry retains the Soviet tradition of 'storming,' or last-minute rush work to meet the annual production plan. You might not want a ride on a Russian helo assembled in December."³⁵

EQUIPMENT AND CAPABILITIES

As well as providing Russia with an opportunity to test its tactics and weapons systems, operations in Ukraine and Syria have offered NATO nations the chance to examine Russian capabilities and assess their own ability to counter them. In some cases, this has led to public statements of concern as to the condition and effectiveness of Western militaries.

The challenges posed by Russian air defense and anti-access/area denial (A2/AD) capabilities on both flanks of Europe—Kaliningrad and Crimea—to NATO's capability to defend its Eastern allies have long been publicly acknowledged by senior U.S. commanders.³⁶ But operations in Ukraine have also highlighted the extent to which Russia has developed its equipment base for high-end war fighting, while some Western allies have focused instead on low-intensity and counterinsurgency warfare, allowing their capability for high-intensity conflict to atrophy.

In particular, in conditions of an overall technological lag, Russia has focused on a range of niche capabilities—those that the West has not bothered to develop or not invested in sufficiently. Some of these are capabilities that Russia will develop in the future, such as the development of hypersonic systems that some claim would allow Russia to "take on the world's greatest military with a lesser navy and a lesser air force."³⁷ But others are already in place. As Andrew Monaghan notes:

While some Western military observers are painting a picture of a "2030 future" in which Russia has developed a "new generation" warfare, one in which Russian ground forces would rely on massive salvos of precision rocket and artillery fire, targeted by UAVs and cyber and electronic

warfare capabilities designed to blind NATO, we do not have to look as far ahead as 2030 to see precisely that capacity taking shape. This emphasizes the point that the Western understanding of the evolution of Russian military, already playing catch-up in the wake of Russia's annexation of Crimea, should not fall behind either (let alone both) of the twin Russian curves of re-equipment and lesson learning.³⁸

Each of the specific capabilities named above gives rise to distinct concerns over those areas of war fighting that Russia has treated with greater priority than the West. After a late start, a number of Western armed forces are urgently studying how best to respond to specific Russian capabilities, such as ensuring that communications and situational awareness are maintained in the face of intensive electronic warfare (EW) and cyber disruption, and mitigating vulnerabilities to artillery overmatch and ubiquitous hostile UAVs.³⁹ Other areas of concern include advanced and active protective systems for combat vehicles and, in particular, artillery. The newer Russian rocket artillery systems offer a much greater range than their Western equivalents, which gives Russia the option of mounting artillery bombardments without concern over counterbattery fire. The wide choice of munitions natures available to Russia (including dual-purpose, improved, conventional munitions; thermobaric, scatterable mines; and sensor-fused munitions) includes some that NATO nations have abandoned or never developed. As put by recently appointed U.S. National Security Adviser Lieutenant General H. R. McMaster, speaking in his former role as director of the U.S. Army's Capabilities Integration Center:

We're out-ranged by a lot of these [Russian] systems and they employ improved conventional munitions, which we are going away from. There will be a 40- to 60-percent reduction in lethality in the systems that we have. . . . Remember that we already have fewer artillery systems. Now those fewer artillery systems will be less effective relative to the enemy.⁴⁰

Meanwhile, the large numbers of armored vehicles destroyed in Ukraine—not only by direct fire but also by tube and rocket artillery fire while deploying or in transit—has spurred plans for the modernization of Russian artillery systems with the aim of increasing their range still further.⁴¹

Russia's intensive application of EW in Ukraine has highlighted another area of comparative neglect by Western militaries that are accustomed to operating across the electromagnetic spectrum without competition. Extravagant claims have been made for the power and reach of Russian EW and cyber capabilities, not all of which are verifiable. The alarming reports in late 2016 that a Russian malware attack had enabled the location and elimination of Ukrainian artillery units were later plausibly debunked.⁴² But for Russia, EW units are intended to be an integral part of every maneuver unit,⁴³ and their role extends well beyond targeting opposing military formations and into suppression of civilian communications.⁴⁴ Even in the center of Moscow, Russia has shown itself willing to routinely jam GPS signals for security purposes, neutralizing civilian navigation systems.⁴⁵ At the same time, Russia has introduced new stand-alone communications and data networks with a reported low probability of intercept, reducing their vulnerability to countermeasures or exploitation by Western adversaries.

Russia's extensive use of UAVs in Ukraine and Syria provides a case study of how a deficiency identified in the 2008 Georgia campaign has now been rectified; according to some assessments, the capabilities introduced outstrip their Western equivalents. Western militaries, accustomed to having undisputed control of the air and access to all the intelligence, surveillance, target acquisition, and reconnaissance (ISTAR) that air assets offer, are rapidly readjusting to the notion of hostile UAVs as a multidimensional challenge. Here too, Russia claims it is planning to introduce a UAV company into every maneuver brigade, providing not only reconnaissance and targeting but also intelligence gathering.⁴⁶

Intended roles for UAVs highlight the prominence of information operations in Russian planning: specific systems are designed for intercepting, jamming, or spoofing civilian cell phone communications, including broadcasting content to smartphones.⁴⁷ Russian officers report that systems like this have proved highly effective in information operations in Syria, and cite the example of delivering tailored content to opposition fighters intended to demoralize them by detailing

“how much their commanders earn and where their bank accounts are and where they go on holiday.”⁴⁸

In Ukraine, “Russians also cleverly use SMS messages to text Ukrainian frontline troops to demoralize their frontline forces—which even includes references to their wives and children back in Kyiv. In other words, they know the names of Ukrainian soldiers serving in the frontline positions and threaten them.”⁴⁹ NATO servicemen too have already been targeted with similar capabilities. Estonian conscripts, either uninformed or unwise enough to ignore warnings against taking connected devices anywhere near the border with Russia, have seen their phones “starting to play creepy hip-hop” and the data on them scrambled.⁵⁰

Further development of Russian UAV capability seems likely as a result of the intense interest shown in so-called kamikaze drones, after their use was demonstrated in the conflict between Azerbaijan and Armenia in April 2016. Russian officers see these UAVs, designed not to carry anti-armor weapons but to be the weapon themselves by destroying enemy vehicles through direct top impact, as a potential key enabler for engaging Western armored formations.

Western militaries are urgently seeking countermeasures. As put by one informed commentator, “killing UAVs is one of those interesting cases where a lot of ‘Why would we need to bother?’ is suddenly flipping over into ‘We really ought to find a way to deal with those.’”⁵¹ Ukrainian UAV operators have found that launching their drones is a hazardous operation and requires stringent precautions to avoid inviting Russian sniper or artillery targeting.⁵² But for Western forces in the same situation, countersurveillance operations to identify and neutralize small UAV launch and control sites on a busy battlefield and in a crowded electromagnetic spectrum might stretch the limits of currently available technology, and, especially, manpower. Meanwhile, their own drones can no longer count on operating in uncontested airspace; many current Western UAVs are large enough to be adequate targets for Russian ground-based air defense. But in this instance, at least, ongoing combat operations in Syria provide not only Russian but also U.S. forces with the opportunity to deploy and test new systems designed for neutralizing UAVs.⁵³

The application of air power overall in Ukraine and Syria provides lessons both where it has been used and where it is conspicuously absent. Ukraine’s lack of reliable and effective reconnaissance, targeting capabilities, and air-delivered precision munitions that could be delivered from outside the range of adversary air defense systems has severely limited the role of air power in the conflict. As a result, analysis of the use and limitations of air power in Ukraine has led Russia to focus on development of all-weather reconnaissance capabilities with real-time delivery of information, standoff precision weapons systems, and armed heavy UAVs. Meanwhile, observation of Russian air and air defense capabilities in Syria and elsewhere emphasizes the need for yet another reappraisal of assumed Western superiority. As also noted by McMaster, for Western forces, the “unprecedented period of air supremacy . . . that changed the dynamics of ground combat” is over.⁵⁴

It has been suggested that large proportions of NATO air forces would be unsuitable for use in conflict with Russia, because it is “quickly becoming too dangerous to fly legacy, nonstealth aircraft within the envelope of the new A2/AD environment.” According to Major General Morten Klever of the Royal Norwegian Air Force, “with [legacy aircraft and] the new evolving systems around us, we could easily be denied access to our own air space.”⁵⁵ (Klever’s comments should be taken in the context that he is directing Norway’s program to introduce the F-35.) Most attention in this context is focused on Russian advanced integrated air defense systems and other A2/AD capabilities, but it has also been suggested that the fourth-generation aircraft operated by a number of NATO allies could eventually be an expensive liability in air-to-air combat as well.⁵⁶ Even the advantages of low observability, commonly known as stealth, are eroding in the context of rapidly improving technologies for detecting aircraft with low radar cross sections.⁵⁷

Nevertheless, it should be noted that Russia faces its own challenges in this area too. Substantial deliveries of new frontline aircraft, and their intensive use in Syria, have given the Russian Air Force an entirely new public face in a short period of time.⁵⁸ Optimistic Russian commentators, comparing their air power specifically with that of the United States,

note approximate quantitative parity with the U.S. Air Force. But they also suggest that U.S. technological superiority is offset both by a much greater replacement rate with modern and upgraded aircraft (even though most of them are based on the venerable Su-27) and by the simple fact that they are present where needed.⁵⁹ Western air power experts, however, note that Russia's lack of fifth-generation aircraft, especially with their ability to provide situational awareness to friendly forces, constitutes a critical capability gap.⁶⁰ The first deliveries of Russia's much-delayed T-50 /PAK-FA fifth-generation fighter are now not promised until (optimistically) 2018.⁶¹

CASE STUDY: THE T-14

The design philosophy of Russia's much-hyped Armata T-14 tank encapsulates how new technological enablers have been applied to facilitate Russian tactical principles in areas of development that have not been a priority for the West.⁶²

The new tank is only expected to enter service in limited numbers before the next decade, and it is unclear whether the advanced features seen on T-14s on display would deliver much more capability than several late-model T-90s that could be procured for the same cost. But the tank's more immediate value may be more as a technology demonstrator and test bed. The novel physical layout of the tank, with its unmanned turret and separate crew compartment, may in this respect be less important than its defensive aid suites and reported major improvements in sensors, communications, electronics, and software.

Unlike Western tank designs, which are optimized for defending a series of positions while falling back in the face of superior numbers, Russian tanks have traditionally emphasized features that allow speed, transportability, low observability, and, more recently, armor enhancements and defensive aids to further minimize losses while assaulting defended positions. For example, low turrets limit the ability of Russian tanks to fight from hull down, and in the case of the T-14, this limitation will be exacerbated by the turret being unmanned and the crew relying heavily on sensors for situational awareness. But if the primary use of armor is to attack, rather than to defend or withdraw in contact, this is not a handicap and instead offers the advantages of a smaller target with less weight.

In addition, Western tanks (and their crews) need to be sustainable and resilient in extended operational use, while Soviet and subsequent Russian designs were intended for limited and short-duration engagement, which also allows crew numbers to be typically smaller—in the case of the T-14, only three people.

All of these assumptions can be discerned in the approach to the T-14's design, particularly the extensive implementation of advanced defensive aids that are reportedly highly effective in countering Ukrainian anti-tank weapons systems. Other innovative features include the reported addition of a tethered drone as a pre-turret-up tool for situational awareness.⁶³ This last feature may have been designed with the assumption that the tank would primarily conduct reconnaissance for itself or for others in its organic unit, as air superiority or a favorable EW environment might not be available for acquiring reconnaissance and targeting data from elsewhere.

None of the technology in the Armata series is likely to be beyond the reach of Western nations. The difference is that, unlike the West, Russia still sees tanks as a critical field of development. As such, in the absence of any significant change in development priorities by NATO nations, the T-14 may lay the groundwork for a future significant challenge to Western technological superiority in armored vehicles.

ORGANIZATIONAL DEVELOPMENT

The year 2016 saw continued reorganization within the Russian army. The fully brigade-based structure—divided into light, medium, and heavy brigades—that had been envisaged by the New Look reforms had appeared comprehensively abandoned, with more divisions made up of traditionally structured units being reestablished. But based on the experience of Syria, plans were also floated for highly mobile “super-light” brigades designed to provide small subunits with wheeled transport that can “slip between enemy formations and deliver quick strikes.”⁶⁴

Russia's experience of small-unit operations has been substantial. The widespread use of Russian BTGs based on one full combat-arm maneuver battalion with additional reconnaissance, fire, and support subunits in and near Ukraine

has been widely assessed as successful, especially for swift cross-border insertion and withdrawal once the operational situation has stabilized. Elsewhere, maintaining BTGs at readiness as a core of larger formations—brigades or divisions—both meets the Russian army’s long-standing aspiration to have so-called permanent readiness units and allows them to be composed of officers and men who are accustomed to working together rather than bringing together unfamiliar elements from different units.

The re-creation of three divisions in Russia’s Western and Southern Military Districts was announced in early 2016. By the end of the year, despite substantial investment in infrastructure required to house these reformed units in new locations, the first of these divisions was reported to have been activated.⁶⁵ The overall effect is to produce a line of substantial Russian combat forces along the western border, including opposite Belarus. By contrast with the ad hoc arrangements of the early stages of the conflict with Ukraine, these new forces are permanently established.

According to one analysis, the re-creation of divisions has been driven by examples of high-intensity combat between land forces in Ukraine.⁶⁶ It has also been suggested that their close proximity to Russia’s western borders results from assessments that units from the Central Military District would take an unacceptably long time to deploy to the area when required. In this way, the forward positioning of major units would reflect the “focus on preemption, escalation dominance, surprise (suddenness and deception), shock, strike power, and speed of action [which] are classic features of Russian military operations. . . . The entirety of the armed forces and its supporting military system are poised for quick, early action in a crisis, conflict, or war to preempt their opponent’s ability to surprise them.”⁶⁷ This focus on speed of action or reaction also feeds into Russia’s intensive program of “sudden checks of combat readiness exercises” or so-called snap exercises for both conventional and nuclear forces.

Meanwhile, the long-promised “information operations troops” have finally been announced as part of the Russian order of battle.⁶⁸ Consecutive Collective Security Treaty Organization exercises in mid-2016 saw the explicit use of “psychological

warfare and information confrontation subunits.”⁶⁹

The distinction between these units and those conducting cyber and intelligence operations is important. In keeping with the continuing mismatch between Western and Russian concepts of information operations, Shoygu’s announcement of “information troops” was widely misinterpreted in Western media to indicate that these were intended to provide primarily a cyber capability. Instead, their purpose appears much more in keeping with the broad, Russian definition of information activities, of which cyber is just a component. Russian officers emphasize that the formations tested in these exercises, and already deployed in Syria, are in some cases using techniques “unchanged since the Great Patriotic War,” including loudspeaker broadcasts in foreign languages and leaflet drops.⁷⁰ At the same time, they note the new capabilities these units are provided by UAVs designed to intercept or broadcast data on cell-phone networks, as described above.

Strategic cyber and information campaigns appear to be conducted by other organizations and with other aims. Russia’s increasingly overt use of hostile cyber and information campaigning, as exemplified during the 2016 U.S. presidential election campaign, demonstrates that “Russia is assuming a more assertive cyber posture based on its willingness to target critical infrastructure systems and conduct espionage operations even when detected and under increased public scrutiny,” according to former U.S. director of national intelligence James Clapper.⁷¹ It also reflects a shift in Russian thinking about the potential power of information warfare, which goes to the heart of how wars are won—whether by destroying the enemy or by rendering the enemy unable to fight.

THREAT VS OPPORTUNITY

Russia’s recent military interventions have been responses to direct security challenges. When looking West today, Russia’s General Staff is likely to see a number of potential problems developing but no overt and immediate security threat of the kind that Russia saw arising imminently in Ukraine and Syria. At the same time, if there is an argument for preemptive action to prevent the security situation on Russia’s western periphery from further deterioration, it will be made with growing urgency.

Speculation continues over the wide range of scenarios under which Russia could take assertive military action in Europe. But for this to happen, the status quo has to be upset in such a way that Moscow is provided with both a trigger for action and a perceived opportunity to improve its strategic situation by taking that action—or, as in the cases of Ukraine and Syria, to prevent what would be perceived in Moscow as disastrous and damaging foreign intervention.

In other words, as long as its security situation remains stable, Russia is unlikely to destabilize it. But within this context, three potential scenarios stand out as specific dangers.

Belarus

After a considerable period of simmering—when only interested Moscow- and Minsk-watchers were aware that Belarus has constituted a potential next Ukraine—difficulties in the country's relationship with Russia have, at the time of writing, come very much to the fore. President Alexander Lukashenko's increasing difficulty in managing his balancing act and maintaining his country as an independent state rather than a province of Russia could well lead to a tipping point where Russia feels it needs to take decisive action to safeguard its interests.

The Suwałki Gap

Much has been written in media commentary about this stretch of land that connects Kaliningrad with Belarus, often seizing on and misinterpreting comments by senior U.S. officials. Two points are worth emphasizing when considering a Russian move here. First, a coup de main to close the Suwałki gap would more likely facilitate a larger Russian operation than remain an isolated incident. If Russia felt able or obliged to deploy military force to cut NATO's land lines of communication to the Baltic states (the scenario most widely discussed in public), relations with the West must already have deteriorated to the extent that broader conflict would likely already be under way. Second, many of the predictions of Russian action assume a compliant Belarus, with its military functioning as merely an extension of the Russian Armed Forces. The real situation is greatly more nuanced than this—Belarus may not wish to go to war with Russia but it is demonstrating no inclination to go to war *for* Russia either.

As with a number of other scenarios, the power of action in this region lies in its potential for destabilizing NATO and demonstrating the alliance's helplessness. It is claimed in Russia that if Poland in 1939 had acquiesced to German demands for a land corridor to Danzig, WWII could have been avoided. No matter how remote this may be from the truth, it should be seen as a potential rationale and justification for Russia demanding—or establishing by subterfuge or so-called humanitarian convoys—a land corridor to Kaliningrad if the situation permits it. This would only happen if Russia was confident that it could predict, or manage, the NATO response or lack thereof.

Missile Defense in Poland

Russia has repeatedly promised that it will take some form of military action against the U.S. ballistic-missile defense installation in Redzikowo, Poland, which Russia argues is a threat to its strategic nuclear deterrent. In December 2016, Shoygu reported that measures to do so were now in place. The possibility of Russia carrying out its promises on or against Polish territory is ordinarily discounted by those who have substantial faith in the power of Article 5 of the North Atlantic Treaty and assume that this would immediately trigger a firm NATO response. However, once again, Russia (having read the text of the treaty and realized how full of loopholes it really is) could take action if it were confident that doing so would deprive NATO of its *raison d'être* by exposing it as powerless to respond to a direct challenge. Whether in the form of a missile strike or a destructive raid by special forces detached from a scheduled naval exercise (Redzikowo is just five minutes by helicopter from the Baltic coast), military action against missile defense installations would not be an end in itself but a lever to a much greater strategic goal.

In both of the latter cases, Russia's confidence in its assessment of how NATO would collectively respond is significantly influenced by an entirely new factor: the attitude of the new U.S. administration. At the time of writing, this remains an unpredictable element in U.S.-Russia relations. Despite early fears that U.S. President Donald Trump would prove excessively accommodating to Russian desires, his government is indicating that it might take a firmer line in defense of

U.S. interests and be far harder to manipulate than the prior administration.⁷² To the extent that Trump declares or demonstrates that U.S. interests include the defense of its allies, this too will inhibit Russian action.

Short- to medium-term developments will combine to further constrain Russia's options for taking assertive action to defend its perceived interests. The scales of relative defense power currently favor Russia, but the longer-term trends do not. Sanctions on high-technology equipment for military use will continue to blunt the modernization program, and the sustainability of defense spending will eventually become a mounting challenge. Meanwhile, Russia's potential adversaries in Europe are finally and belatedly starting to focus on increasing their capability to defend themselves. The arrival of the NATO Enhanced Forward Presence (eFP) battalions in the Baltic states and Poland in mid-2017 will severely limit any potential for Russian interference there without immediately involving other NATO members. Russia has limited time to exploit whatever opportunities may arise to improve or safeguard its strategic position before doing so becomes significantly more challenging.

CONCLUSIONS AND RECOMMENDATIONS

At the time of writing, Russia's domestic prowar rhetoric continues unabated. It is embraced with apparent enthusiasm by some sections of the population and is effectively unchallenged within the country.⁷³ Chief of the General Staff Valeriy Gerasimov does not appear to be exaggerating when he says that "the Armed Forces are now arriving at a fundamentally new level of combat readiness, and this is thoroughly supported by [Russian] society."⁷⁴ In order to retreat from this policy of conflict preparation, the Russian leadership would need to provide some explanation for why the threat has now receded; in other words, to demonstrate some kind of victory—military or political, real or fictitious—over the West that has caused it to back down.

Bombastic rhetoric from Russia need not be taken at face value;⁷⁵ but it remains the case that, as noted in a benchmark Swedish study, "the fighting power of Russia's Armed Forces has continued to increase—primarily west of the Urals. . . .

This is due to additional units and weapons systems, increased readiness and—primarily where the Ground Forces are concerned—a higher proportion of combat-ready units."⁷⁶ In addition, Russia has now achieved a long-standing ambition for its Armed Forces. "The increase in fighting power leads to a second main conclusion: Russia is able to and may launch two simultaneous large operations."⁷⁷

At the same time, Russia's priorities have shifted "from the accumulation of seemingly unlimited military power to devising new concepts that integrate conventional, nuclear, and unconventional elements of military power in order to build a complex toolkit for facing various contingencies."⁷⁸ This new and more precise military instrument can be applied with more finesse than its predecessors, which may increase readiness to use it, given the ability to exert "just enough force to get the policy job done, but not more."⁷⁹ The job in question could be coercion through the threat of military force rather than its actual use, capitalizing on the adversary's fear of conflict: according to senior researcher Mark Galeotti, Russia can now deploy "an extensive, aggressive, and multi-platform attempt to use its military and the threat of force as instruments of coercive diplomacy, intended to divide, distract, and deter Europe from challenging Russia's activities in its immediate neighbourhood."⁸⁰

Similarly, Kennan Institute fellow Michael Kofman argues that demonstrations of high-end conventional capabilities "are not meant for the actual fight. Instead, they are intended to make an impression on the United States. The first goal of the Russian leadership is to make the combat zone its own sandbox, sharply reducing the options for peer adversaries to intervene via direct means."⁸¹ In particular, Russia has demonstrated substantial capability in delivering strikes at ranges in excess of 300 kilometers (about 186 miles), with both conventional and nonstrategic nuclear weapons deliverable not only by the navy and Long-Range Aviation, but also by the Russian Ground Forces.⁸² In addition to Iskander variants and the Bastion coastal defense missile system for land-attack use, the wide range of theater missiles and land-attack cruise missiles available to Russia provide the option of nuclear dominance over NATO member states that

are still observing Intermediate-Range Nuclear Forces (INF) Treaty bans and reluctant to discuss how to respond to nuclear coercion or to exercise deterrence.

This unwillingness to confront Russia's flouting of the INF Treaty may in part stem from the lack of evident leverage to induce Russia to return to treaty compliance.⁸³ The ongoing debate over whether the United States should walk away from the INF Treaty has to contend with the reality that Russia has already done so.⁸⁴ The difference between this and Russia's earlier renunciations of other bilateral arms control and confidence-building measures with its immediate neighbours and with the Conventional Forces in Europe (CFE) Treaty is that there has been no overt Russian statement of intent not to abide by the treaty. In effect, Russia is challenging the United States to present evidence of its treaty violations and consequently reveal the extent of its covert intelligence on Russian missile development and deployment. Meanwhile, the INF Treaty currently constitutes a unilateral arms limitation, observed only by the United States, while other competitors around the world are busily developing their own missile capabilities that the United States is constrained from matching.

Given the disparity in overall military and economic power, full-scale, prolonged, and conventional conflict with NATO would be likely to entail unsustainable losses for Russia. Any options for use of the military to challenge the West must therefore count on a swift resolution, exploiting Russia's local superiority before the full but distant potential of the West is brought to bear. Russia's intervention in Syria has confirmed for Moscow that limited but decisive military action is effective in resolving intractable political confrontations, and can cause the West to back down in the face of *faits accomplis*.⁸⁵ This is a dangerous lesson: Putin may not necessarily have developed a taste for conflict, but it is entirely likely that he has developed a taste for success, with or without the actual deployment of troops. The potential for surprise, plus willingness and capability to take swift action, continues to act as a force multiplier and would assist Russia in seeking a swift result, supported by all levers of military and/or other state power—as International Affairs Adviser to the Supreme Allied

Commander Europe Stephen Covington persuasively explains, there can be no such thing as a conflict with Russia on just the tactical or operational level.⁸⁶

Caveats on the limitations of Russia's new capabilities may be entirely valid, as well as the arguments that manpower shortages constrain Russia's options. But the military, like other tools of Russian foreign policy, does not have to be perfect to be effective. In 2010, it was possible to predict that Russia's dramatic program of military transformation "should in theory have the effect of turning the Russian military from a sledgehammer relying on mass for effect, if not to a scalpel operating with precision, then at least to a hatchet wielded with reasonable accuracy."⁸⁷ By 2017, thanks to extensive practice and refinement and the demonstration of limited and precise incisions in Ukraine, the scalpel analogy is already more reasonable. In any case, at all levels any confrontation with Russia would be in a profoundly different environment to that experienced by an entire generation of NATO armies.

Recommendations

It has already been recognized that Western militaries must deal with the legacy of "a generation that has lost the skills of maneuver warfare in contested domains—land, air, sea, and cyber."⁸⁸ This includes urgently optimizing skills and capabilities that are substantially new, plus others that have not been needed in decades.⁸⁹ It is essential now to prepare fully for confrontation with the new capabilities tested and demonstrated by Russia in Ukraine and Syria—in addition to the specifics of future combat that were identified as drivers for change in the Russian Armed Forces even before the intervention in Ukraine, including greater roles for special forces, indirect action, aerospace and information space activities, and so-called nonmilitary methods.⁹⁰

NATO forces should by now be training and exercising with the following assumptions in place:

- opposing forces making extensive use of UAVs to exercise constant real-time surveillance;
- substantial and integrated ground-based air defense, neutralizing friendly air support;

- offensive EW capabilities preventing acceptably free use of the radio spectrum;
- swift targeting by concentrated artillery fire with advanced munitions, from ranges beyond the reach of friendly counter-battery fire; and
- forms of electronic and cyber attack, including exploitation of personal data harvested from any connected device brought into an operational area.

In addition, planning and exercising should focus urgently on countermeasures to already identified Russian niche capabilities, and how best to exploit those areas where NATO forces still significantly overmatch Russia. But several of the key advantages enjoyed by Russia's Armed Forces—speed of decision, presence where needed, and will to act—can only be countered by a more strategic shift in policy.

Purely military precautions constitute preparation for the worst case scenario. Efforts to avoid that worst case, by reducing the likelihood of a direct confrontation with Russia, should include a long-overdue adjustment in the United States' and NATO's declaratory policy to reflect the reality of the current state of relations with Moscow. NATO's eFP battalions in the Baltic states and Poland constitute a token force to complicate, rather than prevent, Russian adventurism there. But there should be no obstacle to NATO mirroring Russia's own language and publicly discussing options for far more extensive defensive measures, whether or not they are then implemented. Fears that this may prove provocative are misplaced; recent and historical experience, and Russia's own leadership statements, make it plain that a policy of nonconfrontation is far more likely to invite Russia to action than rising to meet the challenge and making it plain that Western nations can and will be defended. It must be demonstrated that Western military power is present and ready for use, to provide a visible counter to Russia's own new capabilities.

Just as history provides pointers to understand the rationale and assumptions behind Russian behaviors, so it also provides precedents for how the West can best address the challenges they present.⁹¹ A key lesson that transcends all questions of

military effectiveness is the necessity of political will to defend boundaries and values—since superior Western capability is useless without the visible will to use it for its intended purpose. This will must be maintained for the long term, rather than treating 2014–2017 as a current crisis since, in the absence of major and unlikely strategic shocks, Russia will continue to present a challenge for the foreseeable future.

And it must be maintained in the face of Russian tactics of attrition, which combine a barrage of information operations with diplomacy, subversion, insistence, persistence, and dedicating more soft- and hard-power resources to the challenge than the West imagines feasible. In the meantime, Russia is showing no signs of relaxing its long-term and intensive drive to enhance military capability as a key enabler for resolving actual or perceived strategic challenges. Constructing the defensive posture of European NATO allies around the assumption that that capability will never be used can no longer be written off to optimism; it now constitutes criminal negligence.

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TASK FORCE ON U.S. POLICY TOWARD RUSSIA, UKRAINE, AND EURASIA

The task force will assess the strengths and weaknesses of U.S. and Western policy toward Russia, Ukraine, and Eurasia since the end of the Cold War and offer a set of guiding principles for a durable U.S. policy framework. The task force is a joint effort with the Chicago Council on Global Affairs and is supported, in part, by the Carnegie Corporation of New York.



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