
Ukraine: A Test for Russian Military Reforms

Pavel Baev

May 2015



Defense Research Unit
in cooperation with
Russia/NIS Center

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ISBN: 978-2-36567-390-7
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Pavel Baev, “Russian Military Reform”, *Focus stratégique*, No. 55, May 2015.

This text has been edited in cooperation with Ifri's Russia/NIS Center and is also published in the collection *Russie.NEI.Reports*, No. 19.

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Abstract

In the recent years Russia has made a significant effort in favor of modernizing its armed forces which allowed it to execute the swift annexation of Crimea in March 2014. Nevertheless, the deteriorating economic situation casts doubts on Russia's ability to continue these ambitious reforms. This is especially true for the Strategic Forces which will have to face a reevaluation of the priority they were given in 2010. Uncertainties still linger over the future missions and capabilities of both the Navy and the Air Force. In the meantime, the ground forces, and especially the Special Forces (*Spetsnaz*) components, have to adapt to "hybrid warfare" in Eastern Ukraine while maintaining their own modernization process.

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Depuis plusieurs années la Russie s'est massivement investie dans la modernisation de ses forces armées, se dotant ainsi des moyens qui ont permis l'annexion éclair de la Crimée en mars 2014. Néanmoins, au regard de la détérioration de la situation économique, des doutes apparaissent aujourd'hui quant à la capacité russe à poursuivre ces ambitieuses réformes. C'est particulièrement vrai des forces stratégiques qui devront revoir la priorité qu'elles avaient reçue en 2010. Des incertitudes pèsent également sur les futures missions et capacités tant de la Marine que de l'armée de l'Air. Quant aux forces terrestres et particulièrement les unités de forces spéciales (*Spetsnaz*), elles doivent désormais s'adapter à la « guerre hybride » qui se déroule dans l'Est ukrainien tout en maintenant leur propre processus de modernisation.

Introduction

The lessons from the Ukrainian calamity are too fresh to be systematized dispassionately, but the risk of its aggravation makes it necessary to review what this major European crisis tells us about the status of the Russian Armed Forces. The swift occupation and annexation of Crimea provided evidence for the conclusion that Russia has developed a range of capabilities for effective execution of offensive operations in a new “hybrid” type of war. The deployment of a 50,000-strong grouping of troops on Ukraine’s eastern borders created an impression that Russia was also capable of performing very traditional invasions by means of armored columns and air assaults.¹

The invasion has not happened in such a way; only several tank battalions and artillery batteries were deployed, to gain tactical victories at Ilovaisk (August 2014) and Debeltsevo (February 2015). The Crimean case may well be *sui generis*, but it is nevertheless clear that the military reform that has been implemented in Russia since autumn 2008—in the wake of the Russo-Georgian war—has added more strength to the old-fashioned military machine than many analysts (including this author) were inclined to believe.²

The need to re-evaluate the actual scale of Russian military capabilities is created by the fact that this not-quite-superpower has defiantly entered into a sharp political confrontation with the West, and as of mid-April 2015 shows no intention of backing off, experimenting as it is with escalation dominance.³ It would be erroneous to define this confrontation as a “New Cold War”, as it has often been labeled.⁴

¹ The exact strength and composition of that grouping were never credibly established, but the number of 50,000 was given in many analyses; see, for instance, “From Cold War to Hot War”, *The Economist*, 14 February 2015, available at: www.economist.com/news/briefing/21643220-russias-aggression-ukraine-part-broader-and-more-dangerous-confrontation.

² P. Baev, “The Continuing Revolution in Russian Military Affairs: Toward 2020”, pp. 349-370 in M. Lipman and N. Petrov (eds), *Russia in 2020: Scenarios for the Future*, Washington, DC, Carnegie Endowment for International Peace, 2011. See also, A. Golts, “The Armed Forces in 2020: Modern or Soviet?”, in *Ibid.*, pp. 371-392.

³ This point is emphasized in F. Hill and C. Gaddy, “How Aiding the Ukrainian Military could push Putin into a Regional War”, *Washington Post*, 5 February 2015, available at: www.washingtonpost.com/opinions/giving-weapons-to-ukraine-could-

For once, the level of militarization in Europe has been so much reduced that the number of deployable troops is an order of magnitude lower than it was in the years when SS-20 and *Pershing* were household names even in France.⁵ Self-assertive Russia is economically far weaker than the Soviet Union, and has no reliable allies that could augment its pressure on Ukraine, as President Vladimir Putin informed the Russian Security Council at the emergency meeting on 22 July 2014, which was supposed to approve extraordinary measures for securing Russia's sovereignty – but didn't.⁶

The new military doctrine, approved in December 2014, was expected to elaborate the new Russian thinking on the parameters of the geopolitical confrontation with the West, but it amounted merely to minor revisions of the far from practicable doctrine adopted in 2010.⁷ In the new document, there is slightly added emphasis on the threat from NATO, and the list of threats and dangers is even longer (even the Arctic is included), but the pre-announced interpretation of "color revolutions" as a new form of warfare was omitted, and the character of "hybrid warfare" is not described, except for the increased attention given to information warfare.

There is a distinct new quality to the fast-evolving confrontation between Russia and the West, a quality that on the highest level is produced by the profoundly uncertain transformation of the world system, and, on the elementary level, by the immediate access of combatants to the virtual space of social networks. In this new reality, Russia is experimenting with breaking the old rules of international behavior, and the outcome of this trial-and-error policy could be disastrous—but the point of departure was, without doubt, the increased confidence in its own military potency.⁸

goad-putin-into-a-regional-war/2015/02/05/ec2e9680-abf5-11e4-ad71-7b9eba0f87d6_story.html.

⁴ One of the sharpest predictions of this confrontation is E. Lucas, *The New Cold War: Putin's Russia and the Threat to the West*, New York, Palgrave Macmillan, 2009. For his revisiting of the topic, see E. Lucas, "Russia's New Cold War", *Wall Street Journal*, 19 February 2014, available at: <http://online.wsj.com/news/articles/SB10001424052702304675504579388913610934806>.

⁵ D. Trenin reflects that, when he served in the Group of Soviet Forces in Germany in the 1970s, some 1.5 million soldiers were looking at one another through gun-sights across the inter-German border; see "Rossija i SSHA – vragi naveki?" [Russia and US – enemies forever?], *Ekho Moskvy*, 25 July 2014, available at: <http://echo.msk.ru/programs/year2014/1366290-echo/>.

⁶ One attempt at deciphering this ambiguity by an insightful Russian expert is F. Lukyanov's "Slava bogu, my odni" [Thank God, we are alone], *Gazeta.ru*, 23 July 2014, available at: www.gazeta.ru/comments/column/lukyanov/6141565.shtml.

⁷ The text of the new doctrine constituted an appendix to a short news item on the presidential website, available at: <http://president.kremlin.ru/news/47334>. Putin was uncharacteristically circumspect when presenting this timid document at the Defense Ministry Collegium on 19 December 2014, available at: <http://president.kremlin.ru/news/47257>.

⁸ On the risks stemming from this self-perception, see A. Arbatov, "Chem novyj konflikt mezhdru Rossiej i Zapadom opasnee kholodnoj vojny" [New conflict

This analysis aims to provide a mid-crisis re-evaluation of Russian military capabilities, strength and weakness. One problem with such an undertaking is that, since the start of the Ukraine crisis, the amount of moderately reliable data coming from Russia has sharply contracted; even the estimates of expenditures have become too approximate as inflation rises above 15%, while the ruble has lost more than half of its 2013 value against the euro. This “fog of hybrid war” leaves the author no choice but to rely on his judgment and to warn about an inevitably wide margin of error. The report cannot aspire, therefore, to cover all relevant ground; it starts by taking a closer look at the reshuffling of “top brass”, then questions the rationale for prioritizing the strategic forces, and continues by examining postures of the Navy and the Air Forces, as well as the overall power-projection capabilities, before addressing the questions concerning Russia’s next steps.

between Russia and the West is more dangerous than the Cold War], *RBC Daily*, 6 February 2015.

The Scope of the Shoigu Reform

The far-reaching military reform launched in autumn 2008, when the Russian military expected praise and rewards for the “glorious victory” in the August war with Georgia, is firmly associated with the name of then Defense Minister Anatoly Serdyukov.⁹ A man of budgets rather than bayonets who never pretends to be a strategic thinker, Serdyukov drove plans for downsizing and reconfiguration through desperate resistance in the officer corps and achieved a nearly total dismantling of the old Soviet mobilization base designed for waging a protracted conventional war, before hitting the wall in mid-2012. The main problem that caused his downfall was certainly not a corruption scandal (minor by Russian standards and still not concluded), nor a quarrel with the defense industry about cost overruns, but the lack of trust in Serdyukov’s leadership in the military hierarchy, which undermined the integrity of command structures.¹⁰

By no means a military man, Sergei Shoigu demonstrated with his first symbolic orders and appointments what Serdyukov had never bothered to show: respect for the traditions of military service, and the sense of duty intrinsic to it. He brought with him some of his closest advisers from the Ministry for Emergencies, which he had transformed into a compact but highly efficient “power structure” over 20 years, but most importantly, he promoted to key positions (including the crucial post of Chief of the General Staff) generals with combat experience—something Serdyukov had been highly reluctant to do.¹¹ This newly-formed team understood that many elements of reform (including the relocation and closure of many military academies) were deeply unpopular among the officer corps, and sought to erase that irritation with some superficial changes, while preserving the main achievements, first of all regarding leaner combat units and more flexible command structures.¹²

⁹ V. Shlykov, “The Secrets of Serdyukov’s Blitzkrieg”, *Russia in Global Affairs*, January-March 2010, pp. 29-48.

¹⁰ On Putin’s withdrawal of effective support for Serdyukov, see M. Galeotti, “Moscow’s Military Maneuvers: Enter Shoigu and Gerasimov”, *In Moscow’s Shadows*, 9 November 2012, available at: <https://inmoscowsshadows.wordpress.com/2012/11/09/moscows-military-maneuvers-enter-shoigu-and-gerasimov/>.

¹¹ Chief of the General Staff Valery Gerasimov should be mentioned first in this cohort, as well as his first deputy Andrei Kartapolov and the first deputy to the Defense Minister Arkady Bakhin.

¹² A competent Russian overview of the reform achievements and shortcomings as of mid-2013 is A. Arbatov, “Russian Military Reform: Status and Perspectives”, Carnegie Moscow Center, July 2013, available at: http://carnegie-endowment.org/files/CMC_Brief_MilitaryReform_Rus.pdf.

What helped Shoigu in consolidating his authority was a massive increase in funding, so that it was not necessary to economize on acquisitions and maintenance while raising salaries. While figures in rubles are not very informative, one useful indicator is the share of defense expenditures in Russia's gross domestic product (GDP), which increased from 1.5% in 2010 to 3.2% in 2013 and 4.1% in 2014. He placed a strong emphasis on intensifying combat training at the battalion/brigade level, while making sure that the show-exercises attended by the Commander-in-Chief (CinC) went smoothly. This work has helped to compensate for the failure to resolve the central problem in reforming the Armed Forces: the deadlock in building a corps of professional sergeants/NCOs and reducing the draft by expanding the contract service.¹³ Shoigu had long learned to value professionalism, and the "warriors" among the "top brass" knew that battalions comprised of conscripts (who had on average six months of training) could never be fully combat-ready. While making sure that the 39 newly-formed brigades (about 3,500 troops each) are reasonably functional units, the main task was recruiting *kontraktniki* into the airborne forces (about 35,000 strong), marine battalions (about 9,000) and special operations (*Spetsnaz*) units, which together constitute the bulk of the envisaged rapid-reaction forces.¹⁴ In general, if Serdyukov succeeded in breaking down old structures and habits, Shoigu has ensured that the new structures are useful in performing limited tasks and that the experience gained in local conflicts is internalized in the reinvigorated officer corps.

It is interesting that Shoigu, while diligently attending to his duties, has managed to keep a low profile during the Ukrainian crisis – and so has been left off of the US and EU "black lists". He is too experienced a politician not to be aware of the deepening disaster, and he doesn't really belong to the circle of Putin's courtiers who have no choice but to rally around the boss, who has opted for a sequence of both proactive moves and procrastinations in the crisis (mis)management. Shoigu also refrained from reconceptualizing the military doctrine, limiting his involvement to a few revisions that obfuscate rather than define the strategic priorities determined by the new confrontation. The High Command is showing unquestionable loyalty to the Commander in Chief, but the big-star veterans of many dirty wars know the limitations of their not-so-big battalions, and thus know better than to join any "war party".

¹³ This old problem is revisited in B. Renz, "Russian Military Capabilities after 20 Years of Reform", *Survival*, Vol. 56, No. 3, June-July 2014, pp. 61-84.

¹⁴ The long-serving commander of the Airborne Troops, Vladimir Shamanov, was outspoken about this problem; see his interview "VDV will Make the Basis of the Rapid Deployment Forces", available at: <http://old.militarynews.ru/excl.asp?ex=180>; see also I. Egorov, "Paratroopers will Make an Assault", *Rossiiskaya gazeta*, 1 August 2013, available at: www.rg.ru/2013/07/31/desantniki-site.html.

The Dubious Gamble on Strategic Forces

ne remarkable feature of Russian military reform is that the strategic forces have been completely excluded from the downsizing and spared painful reorganization. The New Strategic Arms Reduction Treaty (START) (2010) established ceilings that required no cuts whatsoever in the numbers of delivery vehicles or warheads, so the only *force majeure* determining their contraction well below the agreed limits was the retirement of Soviet-era weapon systems. The nuclear “triad” and its supporting elements have continued to modernize according to several separate plans, with particular emphases on deployment of nuclear submarines and on building elements of a strategic defense system. Putin’s peculiar remarks at the press conference on 18 December 2014 about “the teeth and claws of the Russian bear” (which referred to the country’s nuclear deterrence) illustrate the fact that strategic capabilities have consistently enjoyed high political attention.¹⁵ Strategic forces have been the main beneficiary of the massive 2020 Rearmament program, approved in 2011 on the assumption of steady economic growth, which has not been realized.¹⁶ While the economic stagnation has necessitated the curtailing of some elements of this ambitious plan, the strategic forces have received all the promised funding (which is still not enough to ensure their desired upgrades) and have been given top priority in the revised 2025 Rearmament program, presented but not approved in late 2014 because not enough account had been taken of the unfolding economic crisis.¹⁷

¹⁵ The transcript of this press-conference is available at available at: <http://kremlin.ru/news/47250>.

¹⁶ The specific parameters of the allocation of the total sum of 20 trillion rubles were not disclosed; it was announced that space and strategic defense programs would receive 20% of the allocated money, and the Navy (including the strategic submarine program) about 25%; see A. Nikolski, M. Glikin, “Vladimir Putin raskryl voennye raskhody” [Putin has Revealed the Military Expenditures], *Vedomosti*, 4 July 2012, www.vedomosti.ru/politics/news/2245289/tajna_4_trln_rub. One useful overview is D. Gorenburg, “Russia’s State Armaments Program 2020”, *Ponars Eurasia Memo* 125, available at: www.gwu.edu/~ieresgwu/assets/docs/pepm_125.pdf.

¹⁷ The total cost of this program was cut down to 30 trillion rubles (from the original estimate of 55 trillion), notwithstanding the sharp devaluation of the ruble; see A. Nikolsky & S. Titov, “Minoborony prosit 30 trln rublej na zakupki vooruzhenij do 2025 goda” [Defense Ministry Demands 30 trillion rubles for Armaments up to 2025], *Vedomosti*, 22 December 2014, available at: www.vedomosti.ru/politics/news/37645801/armiya-vooruzhitsya-na-30-trillionov.

While deliveries to the rocket divisions of the long range *Topol-M* (SS-27) and RS-24 *Yars* (SS-27 Mod2) missiles are only slightly behind schedule, the proposition for extending the life service of the ageing heavy ICBM *Voevoda* (SS-18) beyond 2019 is very uncertain because the service work is performed by the Ukrainian *Yuzhmash* enterprise, while, in the same time, the plan for deploying a new heavy ICBM *Sarmat* by 2020 looks over-optimistic.¹⁸ The project for a new strategic bomber (PAK DA) at the Tupolev Design Bureau aims to have its first test flight in 2019; meanwhile, the ageing fleet of 55 Tu-95MS and 11 Tu-160s is hard pressed to keep up a pattern of regular patrols.¹⁹ The largest investment in the whole 2020-2025 Rearmament program is the new generation of strategic submarines (*Borei* class), but this is also highly uncertain because of the unreliability of the sea-based *Bulava* missile. The failed test in September 2013 was a major setback, but three tests in autumn 2014 were successful, so the serial production has started.²⁰ Three new submarines are now included in the combat order of the Northern Fleet, and three more are under construction in Severodvinsk, but the outcome of the series of *Bulava* launches in autumn 2015 is impossible to predict.

In addition to modernizing the traditional strategic “triad”, Russia has invested heavily in building a strategic defense system, including early-warning radar and a new generation of surface-to-air missiles (S-400/S-500), while condemning bitterly the US plans for constructing an “anti-missile shield”. The revised military doctrine lists the “building and deployment of strategic missile defense systems” among the top military risks, above nuclear proliferation. This obsession with the United States’ presumed intention to achieve invulnerability was evident in Putin’s address to the Russian Security Council that gathered for an emergency meeting on 22 July 2014 to hear more complaints about the “approach of NATO military infrastructure toward our borders” and the convoluted argument: “We are often told that the ABM [anti-ballistic missile] system is a defense system. But that’s not the case. This is an offensive system; it is part of the offensive defense system of the United States on the periphery.”²¹

That excessively fearful discourse cannot disprove the wisdom of hindsight, which makes clear that not only the fixation on airspace defense but the whole priority assigned so firmly to strategic forces is a serious mistake in resource allocation. Russia achieved a noticeable increase in

¹⁸ On this, see V. Muhin, “‘Satana’ poslužit Rossii eshchjo pjat’ let” [*Satana* will serve Russia for five more years], *Nezavisimaya gazeta*, 23 June 2014, available at: www.ng.ru/armies/2014-06-23/1_satan.html.

¹⁹ According to some reports, two Tu-95MS that patrolled around the British Isles and disrupted air traffic above the English Channel in late January 2015 had nuclear missiles on board; see T. Nilsen, “Russian Bomber Intercepted by Norwegian F-16s carried nuclear warhead”, *Barents Observer*, 1 February 2015, available at: <http://barentsobserver.com/en/security/2015/02/russian-bomber-intercepted-norwegian-f-16s-carried-nuclear-warhead-01-02>.

²⁰ A useful source of data on this project is P. Podvig’s blog “Russian Strategic Nuclear Forces”; see for instance “Missile Deliveries in 2014 and Plans for 2015” at: http://russianforces.org/blog/2014/12/missile_deliveries_in_2014.shtml.

²¹ As translated on the presidential website, available at: <http://eng.kremlin.ru/transcripts/22714#sel=34:1,34:37>.

the number of deployed launchers (from 498 to 528) and deployed warheads (from 1,512 to 1,643), according to the New START data for 2014, but these statistics failed to make any political impression.²² Had the *Bulava* project proceeded without a glitch, the fully operational *Yuri Dolgoruky*, *Alexander Nevsky*, and *Vladimir Monomakh* ballistic missile submarines (SSBNs) would not have added any meaningful measure of strength to Russia's vulnerable position in the confrontation with the West over Ukraine. Had Russia, however, put only moderate effort into strategic modernization and prioritized instead its conventional power projection capabilities, it would have had options for a "military solution" and NATO could have been in serious trouble.

The problem for the Russian leadership is that the channeling of resources toward half-completed strategic programs has to be sustained, but needs to be justified by gaining some political dividend from this investment. So far, attempts to bring the nuclear assets into play – for instance, by deploying the *Iskander* ballistic tactical missiles to the Kaliningrad region (in mid-December 2014, which coincided with the sharp decline of the ruble exchange rate) – have been far from successful. Moscow keeps trying to combine steps in nuclear diplomacy (particularly regarding the dispute with the USA on compliance with the INF Treaty) with demonstrations such as, first of all, patrols of strategic bombers. The latter have attracted some attention in Norway, the UK and Canada, but it is clear that the assets comprising the air component of the Russian strategic "triad" are too old to make a proper impression, while the fiasco in maintaining the space echelon of the early-warning system has not gone unnoticed.²³ The Kremlin needs to find a way to turn its nuclear weapons (including non-strategic) into usable instruments in confrontational diplomacy, but remain wary of breaking strong taboos, including on nuclear testing.

²² On the senselessness of this one-sided competition, see A. Arbatov, "Ne vtjanemsja li v novuyu gonku vooruzhenij" [We are getting into a new arms race], *Nezavisimoe voennoe obozrenie*, 6 February 2015, available at: http://nvo.ng.ru/realty/2015-02-06/1_gonka.html.

²³ On the expiration of old satellites and the delays of new launches, see I. Safronov, "Tundra budet tolko letom" [Tundra will come only in summer], *Kommersant*, 11 February 2015, available at: www.kommersant.ru/doc/2664884.

New Perspectives for the Russian Navy

Except for the imaginary “strategic bastion” in the Barents Sea, the Navy had a medium-low priority in the Soviet military build-up, and it was degraded more than other branches of the Armed Forces by the massive cuts in resource allocation in the 1990s. President Putin was clearly committed to reversing this decline (perhaps due to the deep effect of the *Kursk* submarine disaster at the very start of his presidency), so a quarter of the funding in the 2020 Rearmament program has been allocated to shipbuilding, which has indeed registered a surge in production. While strategic forces take at least half of this cashflow, there are also large-scale projects for strengthening other elements of the re-energized Navy, first of all submarines. For that matter, at the Severodvinsk shipyard, the keels of the *Borei*-class SSBNs are laid next to those of the *Yasen*-class SSNs, the first of which joined the Northern Fleet in June 2014, while seven more are scheduled to follow by 2020.²⁴

What made the Navy of such interest to the Kremlin was its ability (limited as it was) to perform a range of global missions, from making friendly port calls to Cuba to “showing flag” in Syrian waters and instilling fear in the pirates of the Gulf of Aden. This activity continued in 2014, so that the “blue water” cruises of the few deployable destroyers were stretched to maximum duration. Neither submarines nor the small corvettes/frigates that Russian shipyards are building are really useful for such far-reaching missions, but the only major surface ship that could be added to the Navy’s order is the old nuclear cruiser *Admiral Nakhimov*, which has been awaiting repairs since 1999. The solution to this problem was found in France, and Russian admirals—who initially were skeptical about the political deal regarding the delivery of *Mistral*-class amphibious helicopter carriers—have gradually warmed to the proposition of building four squadrons around modern amphibious assault ships, particularly when it became clear that the dream about aircraft carriers could not possibly come true.²⁵ The Ukrainian crisis put the plan at risk, but the French authorities have played the *Mistral* card very carefully, keeping it out of the sanctions regime and signaling to Moscow that the first ship might be

²⁴ See S. Safronov, “Nyneshnij god dlja VMF Rossii stanet urozhajnym na korabli i podlodki” [This year will be rich for Russia in new ships and submarines], *RIA-Novosti*, 25 July 2014, http://ria.ru/defense_safety/20140725/1017460532.html.

²⁵ See on that V. Sherbakov, “Plany—strategicheskie, a problem—tekushchie” [The plans are strategic, and the problems—current], *Nezavisimoe voennoe obozrenie*, 14 February 2014, available at: http://nvo.ng.ru/armament/2014-02-14/1_plans.html.

delivered on schedule providing that there was no escalation in hostilities.²⁶ It was only in late November that the decision on indefinite postponement of the deal was conveyed to Moscow, bringing to the end its hopes of exploiting this joint project so as to instigate divisions inside NATO on the parameters of the strategy of confronting Russia.²⁷

Russian admirals have no illusions that a few major surface ships of this type could grant the Navy an ability to engage in a sea battle with NATO in any potential theatre; what they have in mind primarily is the need to strengthen the capacity of the Pacific Fleet to engage in forceful maneuvering in various maritime mini-confrontations in the East and South China Seas. The French-made *Mistral*-class *Vladivostok* would have fit the bill for such limited power projection perfectly, and it makes plenty of logistical sense to base two ships of this class together. But this naval “pivot” to the Far East has been derailed by the spiraling confrontation, in which the Sevastopol naval base was a key trigger and remains a focal point. Putin’s argument about preventing NATO from taking control of this base betrays the need to rationalize the opportunistic move in annexation of Crimea, which sits well with his domestic audience but in strategic terms amounts to a bad mistake. The deployment of new forces to Crimea cannot alter the fact that the logistics of this grouping is stretched thin, because all supplies have to be delivered by sea, while the naval yards serving the Black Sea Fleet have seriously deteriorated.²⁸ The grand design for building the “Fortress Crimea” that would dominate the Black Sea theatre fails to take into account the fact that Turkey, Romania and Bulgaria are the NATO member states most threatened with this development, even though Moscow seeks to cultivate ties with them, and above all with Ankara.

²⁶ As the newly constructed stern of the second ship (named *Sevastopol*) was transported from St. Petersburg to Saint Nazaire in late July, Deputy Prime Minister D. Rogozin issued an anxious statement that, if France were to break the deal, Russia would build the *Mistral*-class ships through its own efforts; see available at: http://ria.ru/defense_safety/20140730/1018171836.html.

²⁷ One bitter reflection is that of A. Mozgovoi in “Unizhenie ‘Mistralem’” [The Mistral humiliation], *Nezavisimoe voennoe obozrenie*, 12 December 2014, available at: http://nvo.ng.ru/realty/2014-12-12/1_mistral.html.

²⁸ On the dubious rationale for deploying *Iskander* missiles and Tu-22M bombers, see V. Muhin, “Krym ne nuzhdaetsja v jadernykh boepripasakh” [Crimea does not need nuclear weapons], *Nezavisimaya gazeta*, 22 October 2014, available at: www.ng.ru/armies/2014-10-22/3_kartblansh.html. See also R. McDermott, “Fortress Crimea: Russia Shifts Military Balance in the Black Sea”, *Eurasia Daily Monitor*, 9 December 2014.

The Uncertain Future of Russian Airpower

The unique feature of combat operations in the Donbass war zone has been a near complete absence of air strikes or close air support, which usually are the major means of waging local conflicts. In fact, it was not Russia but Ukraine that tried to make use of its air force in spring-summer 2014, but had to abandon the attempts to exploit this advantage due to heavy losses. Russia has supplied the rebels not only with portable *Igla* (SA-24 *Grinch*) but also with *Buk-M1* (SA-11 *Gadfly*) surface-to-air missiles; as a result, the flight MH17 was mistaken for a target by the crew of one of those on 17 July 2014.²⁹

Persisting with denials of direct military involvement, Moscow indeed cannot bring its considerable air assets to bear on the battlefield. It has sought to compensate for this inability with multiple demonstrations of its capabilities. It is in the Baltic “theatre” that these demonstrations have been particularly persistent; the Russian Air Force has significantly increased its activity near and often just inside the airspace of Estonia, Latvia, and Lithuania, as well as Finland and Sweden.³⁰ However, the net effect of this sequence of maneuvers and incursions has been far from the desired effect, as NATO upgraded the pattern of Baltic Air Policing, while every intercept of such antique items as the Il-20M *Coot* reconnaissance aircraft invites questions about their fragility.

The urgent need to modernize its air power became evident for the Russian High Command after the mixed results of its power-projection during the August 2008 war with Georgia; the 2020 Rearmament program set the ambitious acquisition target of 350 tactical aircraft and 1,000 helicopters.³¹ The main setback is the delay in starting the mass production of the long-promised “fifth generation” *Sukhoi* T-50 (PAK-FA)

²⁹ Useful data on the rebel hits on Ukrainian planes and helicopters is collected in R. Lebed, “Kakovy poteri ukrainskoi aviatsii” [What are the losses of the Ukrainian Air Force?], *BBC Ukraine Service*, 25 July 2014, available at: www.bbc.co.uk/ukrainian/ukraine_in_russian/2014/07/140725_ru_s_downed_aircr_afts_toll.

³⁰ For a sharp evaluation of these activities, see M. Kramer, “The New Russian Chill in the Baltic”, *Current History*, March 2015, pp. 108-114.

³¹ For details and the raising of doubts, see A. Frolov, “GPV-2020 slaba v oblasti aviatsionnyh vooruzhenii” [2020 Rearmament program is weak in air systems], *Voenno-promyshlennyi kuryer*, 11 September 2013, available at: <http://vpk-news.ru/articles/17361>.

fighter, which since 2007 has become a joint project with India.³² Upgrades of old air platforms and more intense training produce incremental increases in capabilities, but these soon become obsolete due to lack of crucial modern technologies.

Old worries about the long-range high-precision weapon systems have been reinvigorated by concerns about armed unmanned aerial vehicles (UAVs or drones), since Russia is lagging behind in developing this weapon system. These concerns have been translated into accusations that a US deployment of MQ1 *Predator* drones armed with Hellfire missiles constitutes a violation of the INF Treaty.³³ Since catching-up is not in the cards, the main means of countering this combination of old and new strike capabilities is the modernization of the air defense system, which is indeed one of the key priorities in the 2020 Rearmament program. Russia is mass-producing the reasonably effective S-300 PMU-2 *Favorite* (SA-20) surface-to-air missile (based on the Soviet design from the 1980s) and has begun production of its major upgrade S-400 *Triumph* (SA-21) with the range increased from 195 to 400 km, so it seeks to build on this strength.³⁴ Many exercises, including in the Arctic theatre, are aimed at intercepting a sequence of air and missile strikes.³⁵

Despite these efforts, the Russian High Command cannot be confident in the performance of the air defense system, particularly under high electronic stress, and so prefers to keep the zone of combat operations in Donbass as a *de facto* “no-fly-zone”.

³² For a positive evaluation, see D. Majumdar, “The Russian Air Force Super Weapon: Beware the PAK-FA Stealth Fighter”, *The National Interest*, 26 November 2014, available at: <http://nationalinterest.org/feature/the-russian-air-forces-super-weapon-beware-the-pak-fa-11742>.

³³ On the escalating controversy around the INF Treaty, see E. Chernenko, K. Belyaninov, I. Safronov, “Krylatye rakety protiv udarnyh bespilotnikov” [Cruise missiles against strike drones], *Kommersant*, 15 September 2014, available at: www.kommersant.ru/doc/2567310.

³⁴ An upbeat assessment is that of V. Myasnikov, “Protivoraketnaya i protivovozdushnaya oborona Rossii budet luchshei v mire” [Russian missile defense and air defense will be the best in the world], *Nezavisimoe voennoe obozrenie*, 12 December 2014, available at: http://nvo.ng.ru/armament/2014-12-12/1_oborona.html.

³⁵ For details of one such exercise over the Barents Sea in March 2015, see “Perehvatchiki MiG-31 na ucheniyah otrazyat massirovannyi raketnyi udar” [MiG-31 interceptors will counter a massive missile strike in exercises], *Lenta.ru*, 26 February 2015, available at: <http://lenta.ru/news/2015/02/26/mig31/>.

More Special Forces for New “Hybrid Wars”

The clandestine and efficient deployment of several units of special operations forces to Simferopol that secured the swift capture of political power in Crimea by pro-Russian collaborators, followed by the deployment of several Marines and Airborne battalions that isolated all Ukrainian garrisons, thus providing for the smooth annexation of this Ukrainian province by Russia, was perhaps the main military sensation of 2014. The shock and surprise of the operation, achieved through a masterful use of *maskirovka* (military deception), blended with astonishment at the professional effectiveness and impeccably calm behavior of these troops, who thus earned the nickname “polite green men” (the old name *Spetsnaz* is still in use, although these units are no longer subordinated to the military intelligence GRU but are incorporated into the newly established command of the Special Operations Forces).³⁶ This almost bloodless *blitzkrieg* raised questions about possible follow-ups and, accordingly, new threats to NATO.

The ensuing combat operations in Eastern Ukraine did not provide answers, because Russian special operations forces played only a marginal role in the chaotic clashes, in which, on the rebel side, all sorts of disparate war-bands supplied with Russian weapons were slowly pushed back by Ukrainian forces (also an odd mix of military and paramilitary units) until several Russian battalions joined the battle in August 2014 and turned the rout into a victory of sorts.³⁷ That half-hearted invasion with unclear strategic goals and limited tactical means was given by NATO the ambiguous name of “hybrid warfare” and produced a different set of questions about the drivers and directions of its escalation. The nature of Russian thinking about such wars appears muddled, and it has found no reflection whatsoever in the revised military doctrine.³⁸ It is increasingly

³⁶ The term “*maskirovka*” is not quite synonymous with camouflage as it includes misinformation or deception. On the impact of that operation, see S. Pifer, “Watch out for little green men”, *Spiegel Online*, 7 July 2014, available at: www.brookings.edu/research/opinions/2014/07/07-watch-out-little-green-men-pifer.

³⁷ One informed analysis of the Ilovaisk episode is P. Felgengauer, “Kontrudar” [Counter-strike], *Novaya gazeta*, 2 September 2014, available at: www.novayagazeta.ru/columns/65084.html; see also J. Marson and A. Cullison, “Ukraine Suffers Harsh Defeat in Eastern Town”, *Wall Street Journal*, 2 September 2014, available at: www.wsj.com/articles/ukraine-suffers-harsh-defeat-in-eastern-town-1409616541.

³⁸ A useful attempt to decipher this thinking is M. Galeotti, “The ‘Gerasimov doctrine’ and Russian non-linear war”, *In Moscow’s Shadows*, 6 July 2014,

apparent that the pulsating stalemate in the war zone in Eastern Ukraine amounts to a strategic defeat (since the envisaged “Novorossiia” has failed to materialize) and traps Russia in a very difficult tactical situation (since it has to supply the rebel-controlled “Republics” of Donetsk and Luhansk), and thus cannot underpin the newly invented proposition for “non-nuclear deterrence”.³⁹

At the same time, there is hardly any doubt about Russia’s ability to break this deadlock by delivering a strike with some 10-15 infantry and tank battalion groups that had been camping near the border with Ukraine for months until Putin returned them to their barracks in mid-October.⁴⁰ Such an invasion would definitely change the nature of the conflict from “hybrid” into a conventional war, in which Russia would be able to use its significant advantage in air power. The protracted deployment of a grouping amounting to about 50,000 troops in the field camps in the Kursk, Belgorod, Voronezh, and Rostov oblast (region) showed the reasonably high level of combat-readiness of newly minted brigades; however, it also revealed serious shortcomings, particularly as far as the availability of reserves was concerned.⁴¹

This lack of traditionally plentiful “second echelons” is a direct result of Serdyukov’s reform, which involved disbandment of hundreds of “reduced strength” regiments in the Army that had been in fact merely “skeleton” units around depots of heavy weapons (which were partly scrapped and partly put in conservation).⁴² Serdyukov never tried to conceptualize the dismantlement of this old Soviet infrastructure, which was supposed to support massive mobilization for a protracted large-scale conventional war, and the revised military doctrine also says nothing about the irreversible elimination of this supposedly crucial (but in fact long degraded) capability. It is unclear whether this departure from preparing for a “big war” in the Western theatre has registered in Russia’s strategic thinking.

An important emphasis in Shoigu’s reconfiguration of Serdyukov’s heritage was placed on greater intensity of training; indeed, the series of exercises conducted in the background of the “hybrid war” in eastern Ukraine showed a significant improvement in the performance of combat

available at: <https://inmoscowsshadows.wordpress.com/2014/07/06/the-gerasimov-doctrine-and-russian-non-linear-war/>.

³⁹ This point is made in A. Golts, “Zagadka ‘neyadernogo’ sderzhivaniia” [The mystery of non-nuclear deterrence], *Ezhednevny zhurnal*, 15 December 2014 available at: <http://ej.ru/?a=note&id=26687>.

⁴⁰ One useful assessment of Russia’s deployments and re-deployments is I. Sutyagin, “Russian Forces in Ukraine”, RUSI Briefing Paper, March 2015, available at: www.rusi.org/downloads/assets/201503_BP_Russian_Forces_in_Ukraine_FINAL.pdf.

⁴¹ See D. Trenin, “The Russian Military in the Ukraine Crisis”, *Eurasia Outlook*, 12 January 2014, available at: <http://carnegie.ru/eurasiaoutlook/?fa=57690>.

⁴² This point is emphasized in A. Golts, “Putin’s Way of Reforming the Army”, *The Moscow Times*, 1 April 2014, available at: www.themoscowtimes.com/opinion/article/putin-s-way-of-reforming-the-army/497256.html.

units.⁴³ Nevertheless, a fundamental problem is that most soldiers in the regular brigades are conscripts, so that during two seasonal cycles (March-April and October-November) the better-trained half of the personnel in most combat units is replaced by raw draftees. The wave of “patriotic” enthusiasm spurred by the annexation of Crimea helped in recruiting more soldiers to continue service on a contract basis, so that by the end of 2014, the number of conscripts was actually lower than the number of *kontraktniki* (273,000 and 295,000 respectively).⁴⁴ This made it possible to turn the Marine and Airborne battalions into nearly all-professional units and even to add to their numbers, with the aim of doubling the strength of Airborne Forces (to 72,000) in 2019, so that the old idea about building the Rapid Reaction Forces would come close to implementation.⁴⁵

While there is still no command structure that would bring together various elements of such forces, the Crimean operation demonstrated that joint operations could be conducted effectively, even if data on that unresisted deployment remains incomplete and mixed with propagandistic self-glorification.⁴⁶ It is clear, at the same time, that even the better trained and well-equipped *Spetsnaz* units have a huge shortage of modern communication hardware, and have to do their job primarily as if in the pre-computer, pre-GPS and pre-drone era. Russian paratroopers and marines are prepared to perform a range of unconventional tasks, from tracking terrorists across rugged terrain to crowd control, but would certainly be at a disadvantage in executing forward deployment tasks on a modern battlefield. As for the regular tank and mechanized infantry brigades, the fragmented combat experience gained through deploying composite battalions to the Donbass is probably outweighed by the demoralization caused by heavy but unacknowledged casualties and the lack of public praise or even financial rewards. As the character of battles changes to the more traditional conventional operations (minus the air dimension), the Russian top brass would have to inform their political masters that the number of deployable battalions is finite, while the quality of troops oscillates according to the draft cycles and never reaches the minimum level of professionalism.

⁴³ NATO Secretary General Jens Stoltenberg noted that the increased intensity of Russian snap exercises was a serious concern because incidents could “spiral and get out of control”; see J. Borger, “NATO Chief in Warning over Russian Wargames”, *The Guardian*, 13 March 2015, available at: www.theguardian.com/world/2015/mar/13/nato-chief-in-warning-over-russian-wargames

⁴⁴ The standard term of a contract is three years, and the competitiveness of the Army in this particular segment of the labor market depends upon salaries, which were raised to about \$US 1,000 a month before the ruble lost half of its value; see D. Telmanov, “Dvojnój kontrakt” [Double contract], *Gazeta.ru*, 24 December 2014, available at: www.gazeta.ru/politics/2014/12/23_a_6356509.shtml

⁴⁵ See “VDV RF v 2014 g popolnilis’ tremja razvedyvatel’nymi batal’onami” [Three new battalions were added to the airborne troops in 2014], *RIA-Novosti*, 1 January 2015, available at: http://ria.ru/defense_safety/20150101/1041111775.html> and “Istochnik: chislennost’ VDV Rossii planiruetsja uvelichit’ v dva raza” [The VDV strength will be doubled], *ITAR-TASS*, 6 August 2014, available at: <http://tass.ru/politika/1362972>.

⁴⁶ See I. Sutyagin, “Russian Spetsnaz in Ukraine: Implications for Western Defense Policy”, *RUSI Newsbrief*, 2 September 2014, available at: www.rusi.org/publications/newsbrief/ref:A5405A106CDC6B/#.VLu9YS6rEYI

Military Options for the Next Phase

The pause in the hostilities in Eastern Ukraine secured by the Minsk-2 agreement is continuing (as of mid-April 2015). However, the spasm of fighting around Debeltsevo, which in fact happened after the Minsk deal was signed, proved that its legitimacy was feeble and that the ceasefire would be observed only as long as the belligerents saw it as useful. The Russian leadership has few reasons to be content with the outcome of the conflict, and has had some time to assess the military options available for the next stage of escalation.

The swift takeover of Crimea created an exaggerated impression of the capabilities of the special operations forces, and the “victories” at Ilovaisk and Debeltsevo added to that impression, but in contrast, it is hard to avoid the conclusion that the provisional outcome of the “hybrid war” in Ukraine is far from favorable for Russia. The political imperative of maintaining the posture of “plausible deniability” has been seriously detrimental for sustaining effective control over the course of hostilities, and at the same time far from effective in camouflaging the Russian intervention. The experiment with building moderately combat-capable rebel forces from local thugs and Russian “volunteers” of various persuasions was at best partly successful; an undesirable limited intervention became necessary to prevent their defeat, while maintaining a semblance of order in the “rump Novorossiia” requires forceful means to be used against unruly warlords.⁴⁷

Common political sense dictates that this experiment should be discontinued. Moscow can, in principle, cut its losses and allow Ukraine to restore full control, first over the border with Russia, and then over the territory around Donetsk and Luhansk – and to assume full responsibility for their rehabilitation, as the Minsk deal prescribes. Such a prudent retreat remains, however, not only difficult in terms of covering up a major political fiasco, but also ineffectual in terms of managing the domestic crisis in Russia; some softening of Western sanctions would not help much in re-energizing the contracting Russian economy. In the situation of an increasingly painful decline of state revenues and family incomes, Putin may find it necessary to go for another morale-boosting victory in order to ensure the survival of his weakened regime. The list of potential targets for another experiment in “hybrid warfare” is in fact very short. For that matter,

⁴⁷ On the street battle between the Russian *Spetsnaz* and the quasi-Cossacks who claimed control over Krasny Luch city near Luhansk, see M. Tishenko, “Prishli za Kosogorom” [They came to capture Kosogor], *Lenta.ru*, 2 March 2015, available at: <http://lenta.ru/articles/2015/03/02/ataman/>.

the risks involved in dispatching a few hundred “polite green men” to the Estonian border-city of Narva are prohibitively high, because Tallin would demand – and be certain to receive – direct support from the Atlantic Alliance, which has set the forward echelon of the Response Forces there.⁴⁸ Moscow also cannot ignore the strategic fact that the Kaliningrad enclave is highly vulnerable to probable NATO counter-measures. The 76th Pskov Air Assault Division could launch a powerful surprise attack, but Russia does not have a usable position of military superiority in the Baltic theatre and so is unlikely to take chances with so reckless an offensive.⁴⁹

What makes more strategic sense and involves lesser risk is a concentrated attack aimed at opening a land corridor to Crimea across south-eastern Ukraine. Such a breakthrough could not be achieved by hybrid means of as Ukraine has built up its military capabilities, including the defenses of Mariupol (which withstood severe shelling in February), and because the recruitment pool for raising more pro-Russian war-bands has been depleted. Russia could quickly build a grouping of 30,000 troops and achieve the necessary tactical superiority through a combination of armored columns, landings from the sea with close air support. What constitutes the main issue for such a *blitzkrieg* is not the expected Western reaction (a NATO intervention remains improbable, while Moscow might hope for a Minsk-3 round of negotiations), but the inevitable problems in establishing effective control over the newly conquered “Novorossiia”. Already, clashes between rival gangs make the situation in the Donetsk war zone severely unstable, and the traditional pro-Russian sentiments in the wider eastern Ukraine, including such a major industrial and cultural center as Kharkov, have all but disappeared. In this context, it is useful to remember that Moscow found it necessary to gather a force of some 500,000 troops (including a few divisions from the Warsaw Pact allies) for the invasion of defenseless Czechoslovakia in August 1968, while Stalin’s occupation of Estonia, Latvia, and Lithuania in the summer of 1940 was executed by a grouping of some 600,000 troops. At present, the Russian Armed Forces cannot muster such numbers.

The success of any military intervention would ultimately depend on the ability to channel resources into consolidating the gains, and the Crimean case is far from resolved in this respect. Russian military thinking about “hybrid wars” (muddled as it may be) emphasizes the key role of non-military means in waging them, and it is the allocation of financial resources that is the ultimate foundation for deploying such means. It is clear that the

⁴⁸ A sharp view of the unique position of Narva is M. Kaminski, “The Town where Russian Dilemma Lives”, *Wall Street Journal*, 4 July 2014, available at: www.wsj.com/articles/matthew-kaminski-the-town-where-the-russian-dilemma-lives-1404510023.

⁴⁹ In the course of snap military exercises in mid-March 2015, the *Iskander* missiles were shipped to Kaliningrad and a squadron of tactical aviation (Su-34 fighter-bombers) arrived there under the watchful eye of Italian *Eurofighters*, which have assumed the lead in conducting NATO Baltic Air Policing (Poland, Spain and Belgium are also involved); see “Rossiya I NATO uchatsya oboronyat cever drug ot druga” [Russia and NATO learn to defend the North from one another], *Nezavisimaya gazeta*, 18 March 2015, available at: www.ng.ru/armies/2015-03-18/100_obzor180315.html.

consequences of the deepening economic crisis have not even begun to be strategically assessed by the Russian leadership, which insists that the extra-generous expenditures on modernizing the military machine will continue.⁵⁰ Already in 2014, the Defense Ministry took care to spend every ruble of the allocated budget but had to acknowledge that the deliveries of the ordered weapon systems were significantly lower than planned.⁵¹ The lack of funds combined with the impact of sanctions has badly affected the satellite program; since the start of 2015, Russia has lost all space assets of the strategic early-warning system.⁵²

The deep devaluation of the national currency by the end of 2014 is not merely an abstract calculation that makes the 3.3 trillion ruble defense budget for 2015 statistically twice as small in US dollar terms. It will inevitably translate into further decreases in the purchasing power of the Defense Ministry as the lead agency in managing the state order for armaments, and the commitment to grant priority to strategic nuclear arms (above all, the *Borei*-class submarines) necessitates drastic cuts in funding for conventional forces, from postponing upgrades to the ageing fleet of helicopters to halving the salaries for *kontraktniki*.⁵³

Putin's ambitious intention to maintain a sustained and across-the-board build-up of military capabilities cannot be implemented in the situation of deepening economic crisis, but this crisis also compels the Kremlin to exploit to the maximum every security asset it has at its disposal. The position of power underpinned by superior armed forces (and in particular, nuclear arms) constitutes one of these assets, and it has to be used before it is eroded by the curtailing of funding. This propensity toward conflict escalation makes Ukraine's capacity to counter the next Russian move a decisive factor in the event of further hostilities. The more difficult it would be for the Russian battalions to capture Mariupol (and this offensive cannot come earlier than May due to the need for the spring draft cycle), the more time would be bought for countering an offensive aimed at opening the land corridor to Crimea; and the greater effort that securing this corridor would demand from Russia, the less is the probability of a follow-up offensive toward Odessa aimed at connecting with the old bridgehead in Transdnistria. The Ukrainian army is learning bitter lessons from the

⁵⁰ An upbeat evaluation of this trend is in V. Muhin, "Raskhody na oboronu rastut rekordnymi tempami" [Defense expenditures are growing as never before], *Nezavisimaya gazeta*, 13 October 2014, available at: www.ng.ru/armies/2014-10-13/1_oborona.html.

⁵¹ On particular cases of unfulfilled orders, see A. Golts, "Komp'yutery zdes' ne pomogut" [Computers cannot help with this], *Ezhednevny zhurnal*, 21 December 2014, available at: <http://ej.ru/?a=note&id=26736>.

⁵² I. Safronov, "Tundra' budet tol'ko letom" [The Tundra satellite will arrive only in summer], *Kommersant*, 11 February 2015, available at: <http://kommersant.ru/doc/2664884?isSearch=True>.

⁵³ One specific suggestion from the Finance Ministry on cuts in the 2015 budget is to eliminate the expenditures on increasing the number of *kontraktniki* by 50,000; see P. Netebeba, Ya. Milyukova, S. Bocharova "Minfin podgotovil novyi sekvestr byudzheta" [Finance Ministry has prepared new budget sequestration], 22 February 2015, available at: <http://top.rbc.ru/economics/19/02/2015/54e4ab6d-9a79477dae112a21>.

setbacks of summer 2014 and winter 2015; providing military assistance to it is currently a dubious proposition for many European states – but after a further Russian offensive, it could be perceived as a missed opportunity.

Risk assessments even for another proactive strike are prohibitively high for prudent policy-making, so experiments with power projection should have been ruled out, but key decisions in Moscow are driven by a blend of frustration and desperation, and shaped by propaganda-induced machismo. The popular response in Russia to the Western sanctions was “Don’t make my *Iskanders* laugh” (referring to new missiles), but at present there is little for the Russians to laugh about, and all the *Iskanders*, *Topols* and *Bulavas* in the world cannot make them feel safe.

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