
Military Reform against Heavy Odds

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The Russian military is undergoing a radical and painful reform that will drastically reshape its doctrine, training, technology, materiel, and organization. Observers argue that this is the greatest reform that the Russian military has gone through since the 1860s, when Russia moved to a German-style mass army based on conscription. Today, the Russian military is following the US lead: moving toward small but well-equipped rapid deployment forces, leaving large tank armies in the past. The success of this overhaul, however, is by no means guaranteed.

Russia inherited the bulk of the Soviet military machine, which was far too large for its needs and resources. Nor was it appropriate for its actual challenges, as the disastrous war in Chechnya showed. In the 1990s, the dearth of resources was acute; however, since neither politicians nor the military knew what to do, no significant reform occurred. In the 2000s, thanks to oil-fueled prosperity, the military and military-industrial complex enjoyed massive increases in funding, but inefficiency became a growing concern. The Russian military has maintained its Cold War posture, becoming increasingly top-heavy and rusty. While funding of the military is now more adequate, manning of the forces has become a growing problem. The long overdue military reform is thus necessary.¹

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1. There is a body of analysis on the rationale for military reforms; see, for instance, Steven E. Miller, and Dmitri Trenin, eds., *The Russian Military: Power and Policy* (Cambridge, MA, and

The financial crisis took the Russian leadership by surprise, and it coincided with the escalation of the Russian-Georgian conflict into full-blown war for five days in August 2008. Both the financial crisis and the Russian-Georgian war provided crucial impetus to military reform, whose guidelines and timetables were decided in the fall of 2008.

The Russian military consists of three branches—ground forces (Sukhoputnye Voyska, SV), navy (Voyenno-Morskoy Flot, VMF), and air force (Voyenno-Vozdushnye Sily, VVS)—and three independent “combat arms,” not subordinate to any of the three branches: airborne troops (Vozdushno-Desantnye Voiska, VDV), strategic rocket forces (Raketnye Voyska Strategicheskogo Naznacheniya, RVSN), and space troops (Kosmicheskiye Voyska, KV).

This chapter evaluates the attempted military transformation and assesses the risks of failure. It first briefly describes the ongoing reforms and then investigates their underlying ideology. It evaluates the leadership of the reforms and examines specific issues in the strategic forces, the army, the navy, and the air force. Finally, it addresses the problem of resource allocation for military modernization.

Origins and Design of the Military Reform

In the 1990s, the transformation of the Russian armed forces was radical in quantitative terms but qualitatively minuscule: The total number of soldiers was reduced by a factor of four to just over one million men in uniform, but the command structure and organization remained intact. Many reform proposals were drafted and some were attempted but abandoned after encountering shortage of funds and resistance from the military. The last time reform was seriously considered was in summer 2003 when the liberal Union of the Rightist Forces (SPS) party proposed to cancel the draft in its election campaign, but it failed to enter the State Duma.² Defense Minister Sergei Ivanov reassured the military high command that the period of military reforms was over. However, in his 2004 address to the parliament President Vladimir Putin emphasized that “modernization of the army is a task of national importance.”³

London: MIT Press, 2004); Aleksei Arbatov, “Russian Military Policy Adrift,” Briefing Paper 8, no. 6 (Moscow: Carnegie Center, November 2006); Aleksandr Hramchihin and Igor Plugatarev, “The Agenda for a New Army,” *Nezavisimoe Voennoe Obozrenie*, February 8, 2008; Vitaly Shlykov, “Secrets of Serdyukov’s Blitzkrieg,” *Russia in Global Affairs* (November-December 2008), 8–25. My most recent study is Pavel K. Baev, “Neither Reform nor Modernization: The Russian Armed Forces under and after Putin’s Command,” in *The Politics of Security in Modern Russia*, ed. Mark Galeotti (London: Ashgate, 2010), 69–88.

2. Dale R. Herspring, “Vladimir Putin and Military Reform in Russia,” *European Security* 14, no. 1 (March 2005): 137–55.

3. The minister elaborated his thesis in Sergei Ivanov, “Russia’s Geopolitical Priorities and Armed Forces,” *Russia in Global Affairs* (January-February 2004): 38–51; Vladimir Putin,

Yet hardly any modernization occurred during Putin's second presidential term. The nominal defense budget increased annually by 20 to 25 percent, but it was roughly in line with the overall growth of state expenditures and amounted to 2.5 to 2.7 percent of GDP. Official information on the structure of defense expenditures is scant, but the prioritization of procurement (which increased by up to 40 percent annually) failed to increase deliveries of key weapons systems to the armed forces.⁴ These low returns on loudly trumpeted military investments possibly prompted Putin to replace Ivanov with a more capable executive.

In February 2007, Anatoly Serdyukov was appointed minister of defense. This choice was very surprising, because he had previously led the Federal Tax Service and had devoted most of his career to furniture trade and had no military background. Serdyukov's outsider perspective might have been valuable. The distortions in the Soviet-style military were dangerous because of the combination of rising costs and diminishing capabilities, which rendered the armed forces both ineffective and unsustainable. Serdyukov started his attack on the dilapidated military organization by calling for optimization and enhancement, avoiding the loaded term "reform."

The reorganization of the armed forces, announced without warning in mid-October 2008, included four key elements. The first element is a deep cut in the number of officers from 335,000 to 150,000 by 2012, while the number of junior officers (lieutenants) will grow from 50,000 to 60,000. Such draconian decimation involves early retirement of at least 60,000 mid-career officers.⁵ The second element is disbandment of all "reduced strength" units in conventional forces, so that the total number of ground force units will decline from 1,890 to 172, from 340 to 180 in the air force, and from 240 to 123 in the navy. The third element is elimination of regiments and divisions in both the army and the air force, so that the army will change to a two-level battalion-brigade structure and in the air force squadrons will be subordinated to air bases. Finally, the system of military education will be downsized, with many colleges closed and traditional academies relocated from Moscow to new education centers.⁶

Altogether, this reform amounts to a profound change comparable to the military reforms conducted in the 1860s by Dmitri Milyutin after

"Address to the Federal Assembly," May 10, 2006, available at www.kremlin.ru/eng.

4. This apparent paradox is examined in Margarete Klein, "Russia's Military Capabilities: 'Great Power' Ambitions and Reality," SWP Research Paper (Berlin: Stiftung Wissenschaft und Politik [German Institute for International and Security Affairs], October 2009).

5. An officer earns pension after 20 years of service; see Vadim Solovyev, "New Decembrists," *Nezavisimaya Gazeta*, November 21, 2008.

6. This part of the reform is not analyzed in detail here, but a serious disruption of the education process (not least due to the retirement of many professors who preferred to stay in Moscow) is evident; see Shlykov, "Secrets of Serdyukov's Blitzkrieg."

Russia's defeat in the Crimean war and in the 1920s by Mikhail Frunze after the end of the Civil War. It is more profound than Nikita Khrushchev's famous "1.2-million cut" in the early 1960s.⁷

Under a previously approved plan, troop numbers were to have declined to 1.1 million personnel by 2011 and to 1 million by 2016. Serdyukov ruled that the size would be trimmed to 1 million personnel by 2013, three years earlier than previously planned. He did not venture into strategic matters but went for the easiest targets. The central point of his plan is, nevertheless, quite ambitious and amounts to the dismantling of extensive infrastructure for mass mobilization for a large-scale conventional war.

Despite all the outcry in, and sabotage from, the overgrown military bureaucracy, execution of the plan was sustained through the first crucial year. By early 2010, the point of no return had been reached in all four directions of reform. The armed forces, however, are far from acquiring a lean new look, particularly since their tasks remain ambivalently defined and combat capabilities cannot be measured against them.

The Thinking behind the Military Reform

Preparatory work for the reform was conducted quietly during the second half of Putin's second presidential term. This rather peaceful period saw a sharp decline in antiterrorist operations and a significant stabilization of the Northern Caucasus. Deployment of Russian troops beyond the national territory reached a new low, with the withdrawal of three Russian bases from Georgia. Yet, tensions with the United States and the North Atlantic Treaty Organization (NATO) were growing, starting with Putin's famous Munich speech in February 2007. Self-assertive rhetoric was backed by increasing demonstrations of Russia's military might, from the resumption of strategic bomber patrol flights over neutral waters off the Arctic, Pacific, and Atlantic Oceans to joint military exercises with China to Northern Fleet cruises to Venezuela, Cuba, and Libya.⁸

These performances were not all that impressive, revealing rather than camouflaging the deficiencies in the Russian military machine, but they generated an impression that Russian power could be projected.⁹

7. On the history of reforming the Russian military, see Alexander M. Golts and Tonya L. Putnam, "State Militarism and Its Legacies: Why Military Reform Has Failed in Russia," *International Security* 29, no. 2 (Fall 2004): 121–58.

8. The limitations of this military self-assertion are discussed in Jan Leijonhielm, ed., *Russian Power Structures: Present and Future Roles in Russian Politics* (Stockholm: Swedish Defense Research Agency, December 2007); Pavel K. Baev, "Russia's Security Policy Grows Muscular: Should the West Be Worried? Briefing Paper 15 (Helsinki: Finnish Institute of International Affairs, February 2008).

9. Zoltan Barany, "Resurgent Russia? A Still-Faltering Military," *Policy Review* no. 147 (Febru-

The Russian-Georgian war further exposed shocking gaps in air support and command and control.¹⁰ The militaristic discourse, while gaining popularity, did not make it into key official documents: The Foreign Policy Concept (approved in July 2008) did not mention military instruments, and the National Security Strategy (approved in May 2009) elaborated on nonmilitary security challenges, including health care and culture.¹¹ Strategic thinking, however, remained in limbo during the initial stage of the reform because adoption of a new military doctrine was postponed. Defense Minister Serdyukov was free to formulate the key guidelines for transforming the military structures as he saw fit, but as a civilian he refrained from painting a big strategic picture, limiting his task to organizational and budget matters.

President Dmitri Medvedev should have performed the key role in defining security interests and the means for their advancement in line with Putin's idea of "an innovative army" spelled out in his farewell address to the State Council in February 2008.¹² Only two sentences in Medvedev's manifesto-article "Go Russia!" addressed military matters: "Of course Russia will be well-armed. Well enough so that it does not occur to anyone to threaten us or our allies." A much sharper point marked a departure from Putin's foreign policy line: "But resentment, arrogance, various complexes, mistrust and especially hostility should be excluded from the relations between Russia and the leading democratic countries."¹³ Up to early 2010, Medvedev had preferred to avoid identifying military threats and priorities in modernizing the armed forces; in keeping with this, he chose not to address the annual gathering of the high command in late 2008 and not to hold the ceremonial meeting on February 23, 2009 (Defender of the Fatherland Day), which are his traditional functions as commander in chief.

After much delay, however, the long-awaited military doctrine was finally approved in February 2010. The text of this lengthy document pro-

ary-March 2008), available at www.hoover.org (this and all other websites sourced in this chapter were accessed on December 25, 2009).

10. Sober analysis can be found in Aleksandr Tsyganok, "Lessons of the Five-Day War in the Caucasus," *Nezavisimoe Voennoe Obozrenie*, August 29, 2008; and Roger McDermott, "Russia's Conventional Armed Forces and the Georgian War," *Parameters* (Spring 2009): 65–80.

11. The texts of key documents are available at the Security Council of Russia website, Documents Related to Various Aspects of Russia's Security, www.scrf.gov.ru. On the National Security Strategy document, see Fedor Lukyanov, "A Positive but Confusing Strategy," *Moscow Times*, May 20, 2009.

12. Ariel Cohen, "Russia on the March: The Return of the Red Square Parades," Heritage Foundation Web Memo 1805, February 11, 2008, available at www.heritage.org.

13. The extensive debates on this article published in the liberal *Gazeta.ru* hardly touched upon military issues.

vides no explanation for the long delay.¹⁴ The doctrine essentially states that the Russian armed forces should be ready for every type of military conflict—from space wars to peacekeeping operations—and must build corresponding capabilities, for which all necessary resources would be provided. Perhaps the most significant article in the document defines conditions for the use of nuclear weapons. There had been many informed speculations that the document would justify preventive/preemptive strikes, even in local conflicts; in fact, the document confirms only retaliatory strikes: The first use of nuclear weapons is defined as possible only when a conventional aggression threatens “the very existence of the state.”¹⁵

The list of “external military dangers” starts with the alleged “intention” to grant NATO “global functions” and to deploy its military infrastructure close to Russia’s borders, including by enlargement. This statement appears unduly confrontational and has invoked criticism from the alliance leadership, but in reality it is a purely political postscript to the sharp argument about NATO enlargement in 2007–08. What the doctrine does not say is that the dismantling of the Soviet mechanism of mass mobilization amounts to scrapping of the model of protracted conventional war, which means that Russia is not even envisaging any confrontation with NATO in the West or with China in the East.¹⁶ The hidden but entirely practical key assumption is that the Russian armed forces are expected to be engaged only in low-intensity operations—from counterterrorism to power projection—in the post-Soviet South.¹⁷

The doctrine thus has very little if any connection to the ongoing reform, in which elimination of “skeleton” units from the armed forces is presented simply as a way to get rid of useless “empty shells” and cut down the number of officers. The only useful purpose of this document is to shelter the high command from criticism on the lack of strategic vision and to stifle public debates. Having thus covered his lack of leadership, Medvedev duly held the ceremonial meeting on February 23, 2010 and presided over the session of the Defense Ministry Board on March 5, 2010, asserting that the transformation of the military structures proceeds on schedule and is encountering only minor complications.¹⁸

14. The text is available at the Security Council of Russia website, www.scrf.gov.ru, and there is no official English translation. A competent overview was done by Viktor Litovkin, “Doctrine of Striking Back,” *Nezavisimoe Voennoe Obozrenie*, February 12, 2010.

15. Nikolai Patrushev, secretary of the Security Council of Russia, was the main source for those speculations; see Vladimir Mamontov, “Russia Is Changing, and Its Military Doctrine Is Changing Also,” *Izvestia*, October 14, 2009.

16. Aleksandr Hramchihin, “All in All—85 Permanent Readiness Brigades,” *Nezavisimoe Voennoe Obozrenie*, October 16, 2009.

17. Stanislav Kuvaldin, “Army for Modest Power,” *Expert*, October 12, 2009.

18. Irina Granik and Ivan Konovalov, “Defense Exists in General,” *Kommersant*, March 6, 2010.

The main problem with Medvedev's ideas and Serdyukov's action plan is that the major cuts in the number of officers will lead to a deterioration in combat readiness of the forces as only professional sergeants and soldiers can offer real combat readiness for rapid deployment operations. The high command has been avoiding the crucial issue of draft, expecting that the reduction of the conscription period from 24 months first to 18 months and then to 12 months will reduce social tensions.¹⁹ A temporary drop in draft dodging and the drafting of college graduates have eased immediate manpower shortages, but demographic and health problems in Russia will shrink the conscript pool, rendering unsustainable the plan of taking 600,000 soldiers annually into the armed forces.²⁰ What is needed is a big cut from the psychologically convincing total strength of 1 million uniformed personnel to a new target figure of 600,000 to 700,000, which is more appropriate for strategy and budget.

A Team of Reluctant and Accidental Reformers

Serdyukov is closely associated with the execution of this revolutionary reform project. His appointment as defense minister in February 2007 broke the pattern of leaving the military to deal with its own problems. The choice of a "nobody" for this high-profile post appeared rather odd and was interpreted as a maneuver either to promote Sergei Ivanov or remove him from the Ministry of Defense in a complicated political scheme surrounding presidential succession in the 2008 elections. Serdyukov did not rush to reorganize the military but started with streamlining the money flows in the notoriously nontransparent defense budget. He quickly discovered the limits of this cost cutting because the problem was galloping monopoly prices of military goods and services. By the end of 2007, the top brass had stopped referring to him as a "furniture trader."²¹ He survived the cabinet reshuffling in September 2007 (when his father-in-law, Viktor Zubkov, became prime minister) and was reappointed in May 2008, when Prime Minister Putin formed his cabinet.

This confirmation of authority granted Serdyukov a mandate for resolving the conflict with the top brass triggered by his modest proposal for

19. According to Levada Center polls, support for keeping the draft system increased from 32 percent in February 2006 to 41 percent in 2007, 45 percent in 2008, and 47 percent in February 2009, while support for a change in the all-volunteer system declined, respectively, from 62 percent to 54 percent, 48 percent, and 43 percent. See Levada Press Center, "The Attitudes toward Military Reform and Army Draft," Levada Center Polls, March 30, 2009, available at www.levada.ru.

20. Aleksandr Golts, "Reflections of a Seasoned Liberal on the Military Reform Plan," *Ezhednevny Zhurnal*, June 11, 2009, <http://ej.ru>.

21. For a balanced evaluation, see "The First Truly Civilian Defense Minister," *Nezavisimoe Voennoe Obozrenie*, December 28, 2007.

replacing military officers with civilians in noncombat positions (e.g., in medicine and logistics). Compared with some earlier clashes—particularly between Defense Minister Igor Sergeev and Chief of General Staff Anatoly Kvashnin at the start of Putin’s reign—this conflict appeared trivial, but the exercise of political power was swift and brutal. Yuri Baluyevsky, the chief of general staff and a career *genshtabist*, probably expected that hawkish statements about direct threat from US antimissiles planned for deployment in Poland would help him defend his turf. Serdyukov was not impressed and secured Medvedev’s consent to fire him in July 2008. Within a month, several of Baluyevsky’s deputies and aides resigned.²²

The purging of the general staff completely disorganized the chain of command during the war with Georgia in early August 2008, particularly since the experienced Aleksei Maslov was replaced as the commander of the ground forces in late July. The whole upper echelon of the high command became dysfunctional, so key decisions in the crucial hours at the start of the war were apparently made at a remarkably low level in the military hierarchy. General Vladimir Shamanov, the chief of the Ministry of Defense Main Directorate for Combat Training, who returned to active service in October 2007, probably played a key role. Colonel General Sergei Makarov, commander of the North Caucasus Military District, and General Anatoly Khrulev, commander of the 58th Army, who both served under Shamanov in the Second Chechen War, also may have issued orders for combat deployment.²³

Medvedev was shocked by the imperative to take responsibility for a war not of his making, claiming that he “remembers by minute” that “most difficult day” of his life. He became concerned about independent decision making by a gang of “Chechen warriors.” Putin, who had taken pains to keep them under control during the Second Chechen War, apparently concluded that only further purges would control the office corps. Already in mid-October 2008, Serdyukov announced a draconian plan for reforming the military structures: He targeted one particular imbalance—high proportion of officers—envisaging the elimination of some 200,000 positions in only two years. This reorganization involves early involuntary retirements of tens of thousands of officers for whom housing had to be provided, and it also aims to cut down the apparatus of the high command by about 60 percent from some 22,000 to 8,500 officers.²⁴

22. Vadim Solovyev and Vladimir Ivanov, “Serdyukov Decimates the General Corps,” *Nezavisimoe Voennoe Obozrenie*, July 11, 2008.

23. Shamanov organized the “Caucasus-2008” exercises in July (which were not attended by the high command); Khrulev led the troops in the field and went into South Ossetia with the first column that was ambushed outside Tskhinvali. My more detailed analysis of this decision making is in Pavel K. Baev, “Vae Victors: The Russian Army Pays for the Lessons of the Georgian War,” *PONARS Eurasia Memo* 46 (Washington: Georgetown University, December 2008).

24. For an initial feasibility assessment, see Vadim Solovyev, “Military Reform of 2009–2012,” *Nezavisimoe Voennoe Obozrenie*, December 12, 2008.

Because of the financial crisis, resources available for military reform were reduced. In the first half of 2009, Serdyukov had to make corrections to the downsizing schedule and postpone salary raises as well as expansion of contract service. Meanwhile, Medvedev and Putin turned their attention to social issues in the armed forces and pledged to prioritize rearmament in the postcrisis period, while glossing over the problems with incoherent logic of transformations and declining combat readiness.²⁵

Serdyukov's small team in the Defense Ministry was besieged by angry generals. He ordered General Nikolai Makarov, the chief of general staff, known for his loyalty to bosses, to provide justifications for the cuts and reorganizations, but Makarov was heavily criticized for poor performance.²⁶ Seeking to neutralize discontent among the top brass, Medvedev promoted General Shamanov, an influential advocate of reforms, to commander of the prestigious airborne troops (VDV). Although he confirmed his support for modernization, Shamanov immediately cancelled all cuts as well as the shift to brigades in the VDV, stating that these elite forces would be reinforced.²⁷ Medvedev's trust in this supposed champion of reforms, who is a decorated veteran of the Chechen war, was further undermined when Shamanov personally dispatched special forces to stop a criminal investigation of an enterprise owned by a relative. Shamanov had to admit to "inappropriate behavior" but was only reprimanded.²⁸

Serdyukov steadfastly proceeded with his reforms, rendering them irreversible, but he closely guards all information perhaps due to personal preferences and because military opinions only diminish the efficiency of decision making.²⁹ Resistance among the top brass against reforms has continued to grow and necessitated further replacements in January 2010, which might have strengthened Makarov's position in the general staff but hardly promoted any reformers.³⁰ Absence of transparency and information could become a weakness of the reforms as it would lead to poor understanding of the necessary further changes, which the opposition could exploit.

25. Vadim Solovyev and Vladimir Ivanov, "The Reform Has Gone an Unpredictable Way," *Nezavisimoe Voennoe Obozrenie*, May 29, 2009.

26. Konstantin Vershinin, "Military Brain with an Unprofessional Bend," *Nezavisimoe Voennoe Obozrenie*, October 16, 2009.

27. Vadim Solovyev and Vladimir Ivanov, "Generals in Counter-Offensive," *Nezavisimaya Gazeta*, May 29, 2009.

28. The scandal was triggered by reports in Roman Anin, "General and Glyba," *Novaya Gazeta*, September 21, 2009 and Pavel Felgengauer, "18 Brumaire of Vladimir Shamanov," *Novaya Gazeta*, September 28, 2009.

29. Elena Melnichuk and Vasily Toporov, "Unsinkable," *Profil*, October 12, 2009.

30. Viktor Myasnikov, "In the Army: Quiet Rebellion of Generals Is Suppressed," *Nezavisimaya Gazeta*, January 18, 2010.

Reform of the Army Is Radical but not Radical Enough

Ground forces are the main target of Serdyukov's reforms, and so far they have shown little resistance to his radical intentions to decimate their numbers, break their traditional organizational structures, and do away with their philosophy of protracted large-scale tank battles. The numbers given by the high command amount to a truly revolutionary downsizing: The total strength of the army will be halved to 270,000 troops; the overall number of units will plummet from 1,890 to 172; and of the current 22,000 tanks, only 2,000 will remain.³¹ It is not clear what tasks this mini-army will be able to perform, but the current bloated army is hardly able to carry out any tasks.

The long-discussed reorganization from the three-level battalion-regiment-division structure to the two-level battalion-brigade structure makes sufficient sense to overcome the objections of traditionalists. Far more significant is the relatively uncontroversial disbandment of hundreds of "skeleton" units, which implies not only the end of the grand Soviet plan for mass mobilization but also a shift from the previous *matryoshka*-doll model, with a small elite army inside a larger low-readiness army. That model was far from efficient, and Alexei Arbatov argued perceptively that the large, socially disaffected army was hardly useful for anything except auxiliary functions, while still demanding a big share of funding, and the elite army was too small and could not shield itself from the rot spreading from the conscript units.³²

One valuable feature in the abandoned model, however, was that the permanent readiness units were supposed to be fully professional and include only soldiers serving on two- to four-year contracts. This requirement was not consistently implemented but has now been abandoned.³³ Even the elite 76th Airborne Division (which is not split into brigades, thanks to Shamanov's protection)—the pilot unit in the "professionalization" experiment—now needs 1,500 conscripts to fill its ranks.³⁴ With the draft period cut to 12 months, training of soldiers has been reduced to basic tasks. Corruption, brutal bullying (*dedovshchina*) in the barracks, draft dodging, and the unhealthy lifestyle of Russians will all lead to a drop in real combat worthiness of permanent readiness units.

31. Extensive explanation of these reform targets can be found in Nikolai Makarov, "Full Text of Presentation at the Ministry of Defense," *Kommersant-Vlast*, July 13, 2009.

32. Arbatov, "Russian Military Policy Adrift," 7.

33. This issue gained attention when it was revealed that the permanent readiness units deployed in South Ossetia in August 2008 had many conscripts, four of whom were killed in action; see Valery Panfilov, "War with No Contract," *Lenta.ru*, August 20, 2008, <http://lenta.ru>.

34. Aleksandr Golts, "Reforms Go Full Circle," *Ezhednevny Zhurnal*, August 4, 2009, <http://ej.ru>.

Even more problematic is the situation with professional noncommissioned officers.³⁵ Serdyukov's plan is muddled in this regard; he envisions a larger number of lieutenants (which doesn't correspond with lower output from military colleges) but the disbandment of the corps of warrant officers (*praporshchiki*). Some of the latter might be promoted to lieutenants and others might become sergeants. The key issue, however, is the lack of experienced leaders at the level of squad or tank or gun crew, and it is unclear whether the single sergeant school established in December 2009 can cover this need.³⁶ At the same time, the program for recruiting up to 250,000 soldiers on contract has been slashed to 180,000, which is bound to fall further.³⁷ As a result, in the next few years, permanent readiness units will consist mostly of poorly trained conscripts, with perhaps five to seven sergeants (serving on two-year contracts) per platoon commanded by a former *praporshchik*.

The only way to check this degradation of combat worthiness is to reexamine the transition to professional soldiers. The cost could be affordable, since the army is no longer competing in a tight labor market and offers a reasonably attractive job package in a depressed economy. But the focus of the current plan is on modernization understood as increased acquisition of more modern weapons systems, mainly armor.³⁸ The persistence of this tank philosophy is understandable and much of the current armaments are hopelessly obsolete, but the long-promised delivery of the T-95—the new generation main battle tank—will not solve two key shortcomings revealed by the war with Georgia: communication and mobility.³⁹ Putin held a special meeting in Voronezh on developing a brigade-level computerized command-and-control system, but the current design is estimated to cost close to \$250 million per brigade and is based on the problem-ridden GLONASS system.⁴⁰

35. Vitaly Shlykov argued that building a corps of professional sergeants (perhaps in five to seven years) should have been the starting point for reorganizations; see "Current Problems and Logic of the Military Reform," *Nezavisimoe Voennoe Obozrenie*, May 14, 2009.

36. Roger McDermott, "Russian Military Plans New NCO Training Center," *Eurasia Daily Monitor*, September 8, 2009.

37. Vladimir Muhin, "Draft as a Rescue-Wand," *Nezavisimoe Voennoe Obozrenie*, October 9, 2009.

38. Putin visited Uralvagonzavod (the main producer of tanks) in Nizhny Tagil in December 2009 and assured that massive direct support for this enterprise would be followed by a significant increase in orders by the Ministry of Defense; see Yulia Mironova, "Armored Troop Carrier: Vladimir Putin Delivered Money to the Largest Tank Plant," *Vremya Novostei*, December 9, 2009.

39. Aleksandr Golts, "The End of the 'Tank Philosophy'," *Ezhednevny Zhurnal*, July 17, 2009, <http://ej.ru>; Mikhail Rastopshin, "Tank for the Wars of the Past," *Nezavisimoe Voennoe Obozrenie*, May 15, 2009.

40. Viktor Myasnikov, "Putin Turned the Army toward the Internet," *Nezavisimaya Gazeta*, January 19, 2010.

As far as mobility is concerned, the decision in 2003 to once again subordinate army aviation to the air force (because of heavy losses of helicopters in Chechnya) has turned out to be a mistake that is expensive to reverse. It took about a week to transport several battalions from the Moscow oblast to Belarus by rail for the Zapad-2009 large-scale military exercise, and it would be impossible to deploy a brigade to Central Asia.⁴¹ Only the airborne troops maintain the ability for reasonably rapid deployment, and General Shamanov, who shelters them from reforms, is lobbying to acquire An-124 Ruslan heavy transportation planes for the transport aviation.⁴²

Overall, the army needs reforms the most, and while they are focused accordingly, their design flaws could result in extreme deterioration of this central branch of the armed forces.

The Overexploited Navy and the Undertrained Air Force

The navy and the air force are secondary in Serdyukov's reform plan, which does not address their modernization. In 2007–08, they demonstrated the revival of Russia's military might. The navy sailed toward Cuba, Venezuela, and even the pirate coast, while strategic bombers conducted sporadic training flights in the Atlantic and Pacific corridors.⁴³

Both the air force and the navy grant top priority to upgrading their strategic elements—the long-range aviation and ballistic missile nuclear submarines (SSBNs). The bulk of resources allocated to the navy are concentrated on the Borey class of fourth-generation nuclear-powered missile submarines, which are intended to replace the aging Delta III and Typhoon class submarines. The Borey class submarine was redesigned to accommodate the new Bulava submarine-launched ballistic missile (SLBM) in place of the abandoned R-39UTTH Bark missile. The first Borey class submarine, Yuri Dolgoruky, has gone through sea trials, but the vessel's commissioning is in jeopardy due to a series of test failures of the Bulava SLBM.⁴⁴ Two more Borey class submarines are under construction in Severodvinsk. All five remaining Delta III SSBNs will be retired by 2013,

41. Viktor Litovkin, "Blazing Fire and Steel," *Nezavisimaya Gazeta*, October 2, 2009.

42. Vasily Sychev, "The Return of Ruslan," *Lenta.ru*, December 25, 2009, <http://lenta.ru>.

43. In 2008, the official figure was more than 60 flights with total duration of 660 hours, which means one pair of bombers going over the north Atlantic and another over the north Pacific every month, plus a couple of exercises; see "More Than 60 Bombers Flew Out on Patrol in 2008," *RIA Novosti*, December 23, 2008, www.rian.ru.

44. After the spectacular test failure of Bulava in December 2009, the navy command decided to postpone the construction of the fourth Borey-class submarine; see Albert Dubrovin and Sergei Makeev, "Bulava Might Take Off but It Won't Fly," *Nezavisimoe Voennoe Obozrenie*, December 11, 2009.

and only six Delta IV submarines will remain operational—and hardly stay in service longer than 2020.

Nearly all vintage landing ships and minesweepers have to be retired before 2020. Despite the steady decline in the size of the navy, the admirals keep presenting plans for deploying five to six aircraft carrier groups.⁴⁵ The minor naval clash during the Russian-Georgian war has given their plans new impetus, and they are now focused on buying the French helicopter carrier *Mistral* and then building several ships of this class.⁴⁶ The issue of costs is conveniently left out of these debates. Meanwhile, the navy is reducing expenditures on constructing a new base in Novorossiisk, which is supposed to replace the main Russian base of the Black Sea Fleet in Sevastopol by 2017, but if it is not built in time, withdrawal will not be possible.

For the air force, Serdyukov's reforms aimed at replacing all air divisions and regiments with 55 air bases, cutting some 50,000 officers, and the plan is progressing on schedule. Modernization, however, is promised mostly for the medium term. The air force command has subscribed to Putin's proposal of serial production of the Tu-160 strategic bombers, but it took three years for the Kazan plant to assemble the first bomber, which was delivered in April 2008.⁴⁷ The promise to develop a new "invisible" strategic bomber by 2015 is not credible, but then at least 25 out of 64 aging Tu-95MS (Bear H) bombers must be retired. Tactical aviation received two new planes in 2008, for the first time in more than 15 years, but the plan to acquire 8 to 10 Su-34 fighter bombers a year has been curtailed. An unexpected gift for the Russian air force in 2009 were 34 MiG-29, which were delivered to the domestic market when Algeria refused to honor the contract for purchasing them and no other foreign buyer was interested.⁴⁸

The main practical problem for the air force, however, has been lack of training. Even with increased funding in the last few years, the average level in full readiness units of tactical aviation has not exceeded 60 to 65 flying hours a year.⁴⁹ Due to prolonged poor training, demands to quickly raise the quality of performance have led to many accidents; after a crash of the Su-27 fighter aircraft in January 2009, Russia grounded the

45. One competent assessment of the naval posture is Mikhail Barabanov and Mikhail Lukin, "Where the Russian Navy Is Going," *Kommersant-Vlast*, February 25, 2008.

46. Viktor Litovkin, "The Navy Command Is Hunting for Phantoms," *Nezavisimaya Gazeta*, November 2, 2009.

47. Pavel Sergeev, "White Swan," *Lenta.ru*, April 30, 2008, <http://lenta.ru>.

48. Ivan Kononov, "Armed Forces Will Rearm," *Kommersant*, March 6, 2009.

49. This figure given by the commander of the air force, General Alexander Zelin, is a big improvement from 20 to 25 hours, which was the norm in the 1990s, but most probably is reached only in several units; his point on the need for a massive increase in funding appears more believable; see Vadim Solovyev, "Worries and Expectations of the Commander of the Air Force," *Nezavisimoe Voennoe Obozrenie*, August 7, 2009.

whole fleet; the same story was repeated in June 2009 after two crashes of the Su-24. The crash of two Su-27 fighter jets from the Vityazi (Russian Knights) pilot group in August 2009 highlighted the problems of maintenance and training.⁵⁰ Russia suffered surprisingly heavy losses of aircraft in the war with Georgia, including Su-25 close air support aircraft, Su-24 tactical bombers, and Tu-22M3 long-range bomber. Poor training of pilots and friendly fire were responsible for half the damage.⁵¹

The success of reforms in the navy and the air force will be determined not by scrapping deteriorated hardware or structural reorganizations but by greater attention to logistics, training, and substantial rearmament. Combat training improved somewhat in the second half of the 2000s, but maintenance remains poor. Rearmament has been promised toward the second half of the 2010s, but the scope of these promises is so high that their credibility is diminishing.

Financial Matters and the Dysfunctional Military-Industrial Complex

With the disintegration of the Soviet military-industrial complex, two major issues in every reform project discussed since the Russian armed forces came into existence in 1992 have been how to finance modernization and reconnect the defense industry with the military.⁵² Preparing his plan in the time of plenty, Serdyukov assumed that sufficient funding would be available, while Sergei Ivanov, who was elevated to the post of first deputy prime minister, was supposed to sort out the military industry.

As the financial crisis unfolded, Serdyukov had to assert that his reforms would be accomplished without any increases in the military budget. Given the shortage of funding in the crucial initial phase, that promise has dwindled to a commitment to minimize the sequestration of defense expenditures. The federal budget for 2009 was revised several times, and the allocations to the military (amounting to 12.2 percent of the total) were trimmed from 1.38 trillion rubles to 1.21 trillion rubles, with the share of defense expenditures close to 3 percent of GDP.⁵³

The costs of decimating the officer corps have been underestimated.

50. Igor Naumov, "Sukhoi Counts Losses," *Nezavisimaya Gazeta*, August 19, 2009.

51. Anton Lavrov, "Russian Air Force Losses in the Five-Day War with Georgia," in *Tanki Avgusta [The Tanks of August]*, ed. Mikhail Barabanov (Moscow: Center for Analysis of Strategies and Technologies (CAST), 2009), 109–118.

52. Julian Cooper, "Society-Military Relations in Russia: the Economic Dimension," in *Military and Society Post-Soviet Russia*, eds. Stephen L. Webber and Jennifer G. Matters (Manchester: Manchester University Press, 2006), 131–58.

53. Vladimir Muhin, "The Army Has Opened the Emergency Reserve," *Nezavisimaya Gazeta*, October 27, 2009.

The most expensive item is housing, because the state is obligated to provide an apartment for every retiring officer. The Ministry of Defense was able to acquire less than half the apartments it needed in 2009, and it will be unable to provide all the promised apartments in 2010.⁵⁴ The expected income from sales of military land and buildings has been much less than expected, while the costs of closing and moving military academies have skyrocketed. The large expenditures on retirement packages have necessitated postponement of the promised sharp increases in officer salaries and dented financial incentives for contract soldiers.⁵⁵ As a result, instead of cutting out deadwood, the armed forces are losing their most valuable cadres and failing to attract the necessary expertise.

Shortage of funds has also caused delays in technical modernization, but Serdyukov has avoided all conflicts with his predecessor, Ivanov, who now supervises the defense industry. To Putin's satisfaction, Ivanov reports steady increases in defense orders, emphasizing that the State Armaments Program 2015 is firmly on track. Meanwhile Serdyukov is reporting a very different picture to Medvedev: In October 2009, the commander in chief suddenly criticized the "poor returns" on the massive investments in the defense industry and called for cutting production costs as a matter of "survival."⁵⁶

Even arms characterized as modern are superficially upgraded Soviet-era designs that cannot be produced in significant quantities because crucial components are no longer available.⁵⁷

The situation is particularly acute in the aircraft industry, which keeps speculating about a fifth-generation fighter when in fact it can produce neither reasonably modern electronic equipment nor high-precision munitions.⁵⁸ Another sad story is the Bulava SLBM, whose last nine test failures were caused by malfunctioning components. Ivanov pointed to dozens of subcontractors affiliated with the Votkinsk plant to explain these setbacks, which shows that quality control has not been enforced.⁵⁹

The easiest way out of this conundrum is to concentrate efforts on a

54. Vladimir Ivanov, "Deputy Minister Stumbles Over Housing Issue," *Nezavisimoe Voennoe Obozrenie*, December 4, 2009.

55. Vladimir Muhin, "Military Sales without Significant Profits," *Nezavisimaya Gazeta*, January 14, 2010.

56. English translation of this statement is not available at the presidential website; the Russian transcript is "The Beginning of the Meeting on the Issues of Development of the Military-Industrial Complex," October 26, 2009, available at <http://news.kremlin.ru>.

57. Aleksandr Golts, "Instructions for Repairing a Broken Washtub," *Ezhednevny Zhurnal*, October 30, 2009, <http://ej.ru>.

58. Mikhail Rastopshin, "Imitation of the New Weapons Design Process," *Nezavisimaya Gazeta*, October 23, 2009.

59. Viktor Litovkin, "Bulava Is Undeliverable," *Nezavisimaya Gazeta*, October 30, 2009.

few promising directions and import new technologies, abandoning the Soviet model of producing all arms. Some steps in this direction have been taken (described in greater detail in chapter 5); for instance, the contract on importing reconnaissance drones from Israel (following Georgia's example) has been approved despite objections from domestic producers. Advancing a few sensational proposals, like purchasing France's Mistral helicopter carrier, Medvedev is not prepared to contemplate the full scope of a reorientation toward external suppliers that would involve shutting down dozens of domestic plants and research institutes of dubious value. With the average age of employees at the 1,300 defense enterprises hovering around 55 years and the share of worn-out equipment close to 75 percent, the atrophy of the Soviet defense industrial base will soon become irreversible.⁶⁰

The armed forces cannot acquire any meaningful new look without new weapons systems, and after two lost decades of surviving on Soviet stocks the need for rearmament is indeed pressing. The defense industry is lobbying for new contracts but can offer only expensive upgrades of old Soviet models, and the government is promising to address all existing needs but does not have sufficient funds to purchase even limited quantities of these arms.

Conclusion: Profound Change but Limited Success

In the second year of profound reform, the Russian armed forces are in a precarious situation. Further transformation is necessary, but discontent in the ranks and opposition among the top brass are spreading and funding is becoming scarce. The way the reforms were designed risked failure to begin with, and their execution has only aggravated that risk. In hindsight, the narrow focus and great secrecy make sense as the only practical way to launch the reforms, but this selective breakthrough needs to lead to a deepening and widening of reform, maintaining the dynamics of changes while setting new targets. Instead, some backpedaling is taking place, especially in the VDV under Shamanov's command. The original plans are being stubbornly implemented, but little fresh effort is being added. Such slow, fragmented advance is due primarily to postponed problems, which have to be reckoned with along the way.

Information about the progress in building an army with a new look is disconcertingly incomplete, because Serdyukov discourages discussions of the reforms inside the military and refuses to engage in public debate. This self-isolation of a small team of reformers is to a large degree due to their inability to develop a convincing concept of reforms that logi-

60. Aleksandr Hramchihin, "OPK Has Rallied Against Common Sense," *Nezavisimaya Gazeta*, August 12, 2009.

cally connects strategic risk assessments with resource allocation and desired military capabilities. The new military doctrine contains no realistic guidelines and has no relevance for the ongoing transformation because the high command is not prepared to abandon the vision of a looming confrontation with NATO or to spell out concerns about the growth of China's military power. The armed forces are required to prepare for every kind of contingency, but the conventional capabilities that could be built by the mid-2010s would be usable only in local conflicts. Building an army that would not be able to counter acute security threats is one kind of risk, but arriving at an unsustainable military force because of demographic/draft problems is an entirely different kind of risk.

The financial crisis has interrupted Russia's economic growth, necessitating sober adjustments in the leadership's behavior and foreign policy—examined in chapter 9—and ambivalent shifts toward greater realism are indeed taking place. The defense policy, however, remains out of touch with reality. Pledges to build up military might were not convincing in the last years of Putin's petro-prosperity, but now promises to deploy every conceivable weapons system—new heavy intercontinental ballistic missiles and “invisible” strategic bombers, several aircraft carrier groups, and 20 giant Ruslan transport planes—look grotesque, particularly in the wake of the Bulava fiasco. This irresponsible attitude of the leaders toward military reform could be detrimental to the already traumatized armed forces and turn them into a maverick political force.

Serdyukov's position as the one in charge of the experimental transformation of the military is no less vulnerable than Yegor Gaidar's was in 1992–93, especially since Medvedev has not taken responsibility for setting the guidelines for reforms but has merely declared—including in his 2009 address to the parliament—his commitment to modernization and social protection of servicemen. Gaidar always had the larger picture in mind, while Serdyukov apparently operates within set boundaries and prefers not to worry about where his endeavor is really heading. It is remarkable that the resistance to painful and poorly explained reforms has not yet taken more open forms, but this opposition—not only among retired generals and expelled officers but also in the ranks—could be mobilized as the recession begins to break political passivity in society. Firing Serdyukov might seem to be an easy way out for Medvedev, but such scapegoating could work only if his own position were more secure than it currently is. Alienating the army might prove to be too dangerous a gamble.

