



Russian Military Reform and Defense Policy

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Summary

Russia has undertaken several largely piecemeal and halting efforts to revamp the armed forces it inherited from the Soviet Union. In 2007, near the end of then-President Vladimir Putin's second term in office, he appointed Anatoliy Serdyukov—the former head of the Federal Tax Service—as defense minister as part of an effort to combat corruption in the military and carry out reforms. After the August 2008 Russia-Georgia conflict revealed large-scale Russian military operational failures, the leadership became more determined to boost military capabilities. U.S. government and congressional policymakers are following the progress and goals of these reforms as they consider issues related to U.S.-Russia relations and U.S. national security interests.

The reforms launched by Russian leadership called for reducing the total size of the armed forces from its size of 1.2 million in 2008 to under 1 million. Three major initiatives included accelerating planned cuts in the officer corps to reduce their numbers from 355,000 to a later-adjusted total of 220,000. The reforms also included revamping the training of noncommissioned officers to make them more effective and introducing military police, both aimed partly at boosting discipline in the barracks. The reforms aimed to reduce the four-tier command system of military districts, armies, divisions, and regiments to a two-tier system of strategic commands and fully manned brigades that could be quickly deployed for combat. A large-scale 10-year weapons modernization plan also was launched, and military budgets are being increased substantially. The weapons modernization plan prioritizes the procurement of new missiles and platforms to maintain strategic nuclear deterrence, but also includes new planes, helicopters, ships, missiles, and submarines for the Ground Forces, Air Force, Navy, and other arms of service.

Russia's national security strategy, military doctrine, and some aspects of the military reforms reflect assessments by some Russian policymakers that the United States and NATO remain concerns, if not threats, to Russia's security. Other assessments, however, emphasize enhancing counter-terrorism capabilities and possibly hedges against the rise of China. Seeming to stress these latter concerns, in December 2008, Serdyukov asserted that the reforms were aimed at switching to a performance-capable, mobile, and maximally armed military ready to participate in at least three regional and local conflicts.

Compared to Russia's previous attempts to revamp its armed forces, the current reform effort has gone further in altering the force structure and operations of the armed forces, according to most observers. However, the reforms face daunting delays, modifications, and setbacks. It remains highly uncertain whether Russia will be able to marshal the budgetary and demographic resources to field a substantially professional military with high readiness, as planned, or to modernize its ailing defense industries to obtain a new array of weaponry over the next 10 years.

U.S. policymakers have maintained that Serdyukov's defense reforms pose both risks and opportunities for the United States and the West. While warning that Russian military programs are driven largely by Moscow's perception that the United States and NATO remain the greatest potential threats, U.S. policymakers also have raised the possibility that Russia's military reforms might in the future make it feel less strategically vulnerable and that it might participate more in international peacekeeping operations. In general, U.S. policymakers and others have urged a policy of hedging against these possible risks through countervailing diplomacy and defense efforts while also following an engagement policy with Russia to cooperate on global issues of mutual interest and to encourage Russia to democratize, respect human rights, and embrace pro-Western foreign policies.

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Introduction

At the height of Soviet military power in 1985-1986, there were 4.9 million servicemen and women in the active duty forces,¹ and about another 1 million belonged to the Warsaw Treaty Organization (a mutual defense alliance including several Eastern European countries). After the collapse of the Soviet Union at the end of 1991, severe budgetary problems in Russia—which inherited the bulk of former Soviet military forces—precipitated deep cuts in troop numbers and weapons acquisition. Although Russia’s economy improved in the 2000s, permitting higher defense expenditures, the military continued to resist reforms to its mission and organization.

Despite the sizeable reduction in the size of the armed forces, the Russian military is still the fifth largest in the world in terms of active personnel—officially 1 million in 2011—exceeded only by militaries in China, India, North Korea, and the United States. Although Russian defense spending also has greatly decreased, it still is among the highest in the world. Because of the lessened capabilities of its conventional forces, Russia has relied on nuclear forces as a deterrent to conventional or nuclear attack and as a means of response to attack.

Russia has undertaken several largely piecemeal and halting efforts to revamp the armed forces it inherited from the Soviet Union. In 2007, near the end of then-President Vladimir Putin’s second term in office, he appointed Anatoliy Serdyukov—the former head of the Federal Tax Service—as defense minister as part of an effort to combat corruption in the military and carry out reforms. After the August 2008 Russia-Georgia conflict revealed large-scale Russian military operational failures, the leadership became more determined to boost military capabilities, and a new wave of reforms was launched in September-October 2008. According to most observers, the reforms launched by Serdyukov have gone further than previous reforms in altering the force structure and operations of the armed forces inherited from the Soviet Union, although near-term and longer-range effects are subject to debate.² This report examines the character and status of these changes and debate, focusing mainly on those reforms that have impacted conventional armed forces capabilities. The report provides basic information about the military’s leadership and structure, the arms industry and efforts to modernize weaponry (including through foreign arms technology transfers), power projection efforts, and the military budget.

¹ CRS Report 91-636, *Soviet Armed Forces Statistical Trends, 1985-1990*, by John Collins and Dianne Rennack. This report, dated August 28, 1991, is out of print and is available from Jim Nichol.

² European defense analyst Pavel Baev has claimed that the reforms are the most significant since those undertaken by Soviet People’s Commissar for Military and Naval Affairs Mikhail Frunze in the 1920s. Pavel Baev, “Military Reform Against Heavy Odds,” in Anders Aslund, Sergey Guriev, and Andrew Kuchins, eds., *Russia After the Global Economic Crisis*, Peterson Institute for International Economics, the Center for Strategic and International Studies, and the New Economic School, 2010, pp. 169-186. See also Dale Herspring’s similar assessment in “Is Military Reform in Russia for ‘Real’? Yes, But...,” in Stephen Blank and Richard Weitz, eds., *The Russian Military Today and Tomorrow: Essays in Memory of Mary Fitzgerald*, Strategic Studies Institute, U.S. Army War College, July 2010, pp. 151-191. Herspring states that “the closest comparison of these reforms, in terms of magnitude, is the early communist period when a totally new structure was imposed on the remnants of the Bolshevik Army.” Both these analysts and others have stressed, however, that the full implementation of the planned reforms faces serious challenges.

The Question of Russian Intentions

A major question regarding the military reforms launched in 2008 is whether they are intended to recreate or approach the capabilities of a Soviet-era “superpower” armed forces with global reach threatening U.S. interests or to create smaller, professional, armed forces for homeland security and counter-terrorist missions. The intentions of Russia’s leaders are contradictory, according to some observers, with some “Cold Warriors” seeking to recreate a military with global reach to fight vast wars while others seek to tailor forces for modern missions. Elements of both goals appear to various degrees in Russia’s national security strategy, defense doctrine, and other documents and programs (described directly below). Even in military reform efforts launched in late 2008 these contradictions are apparent, although the main thrust of reforms appears to support modern missions. Perhaps regardless of intentions, there are major economic, technological, demographic, and other impediments both to Russia’s ability to recreate “superpower” armed forces ready to carry out strategic land, sea, and air battles in the East and West and to its efforts to create modern armed forces, according to most observers.

Medvedev’s National Security and Defense Policy

On May 13, 2009, Russian President Dmitriy Medvedev promulgated a National Security Strategy of Russia through the year 2020, which in principle provides the basis for Russia’s military doctrine and foreign policy.³ The strategy outlines current threats facing Russia and its security priorities. The strategy praises former President Putin (without naming him) for leading Russia out of its “political and socio-economic systemic crisis” of the 1990s. It proclaims the emergence of “multi-vector diplomacy” in the world (implying that U.S. superpower status is eroding) and “Russia’s resource potential” as ensuring that Russia will “consolidate its influence in the world arena” as a leading political and economic power. Both the national security strategy and the military doctrine were drawn up by the Russian Security Council, headed by Nikolay Patrushev, the former chief of the Federal Security Service, and deputy head Yuriy Baluyevskiy, the former chief of the General Staff of the Armed Forces. Both are considered by many observers to represent those within the leadership who advocate bolstering Russia’s international “great power” status.

The strategy states that globalization has led to new external and internal threats and challenges ranging from resource wars to rising social inequality and poverty within the country that could contribute to unrest. NATO is criticized as an obsolete regional security organization that should be superseded by a new regional security architecture. Nonetheless, the strategy urges a greater regional security role for the Collective Security Treaty Organization (CSTO, a Russia-led mutual security alliance; other members include Armenia, Belarus, Kazakhstan, Kyrgyzstan, Tajikistan, and Uzbekistan), which it appears to view as potentially equivalent to NATO. It states that NATO’s enlargement to countries sharing borders with Russia and NATO’s adoption of out-of-area missions are “unacceptable,” although it also avers that Russia is open to cooperation with NATO. An increasing global competition for resources could lead to military conflict, including near the borders of Russia and its allies, the strategy warns.

³ Russian Federation Security Council, *Russian Federation National Security Strategy Until 2020*, May 12, 2009. For an English language text, see Open Source Center, *Central Eurasia: Daily Report* (hereafter *CEDR*), May 13, 2009, Doc. No. CEP-557001.

The United States (though not named) appears to be criticized as threatening Russia's military security by attempting to achieve "overwhelming supremacy in the military sphere." The strategy proclaimed that despite this U.S. effort, Russia would "undertake all necessary efforts at the lowest level of expenditures to maintain parity with the United States in strategic offensive weapons." At the same time, the strategy calls for establishing a "strategic partnership" with the United States that appears to be envisaged as a global diarchy.

The strategy proclaims that national defense and internal control are the main national security priorities. To ensure national defense, the strategy calls for preserving strategic nuclear capabilities, reorganizing the conventional armed forces, and revitalizing defense industries. Perhaps reflecting the 2008 Russian-Georgian conflict, the strategy stresses that the military has a responsibility to protect Russian citizens in nearby states. Internal control is assured through enhanced counter-intelligence, counter-terrorism, anti-transnational crime and corruption, and border control efforts.

U.S. analyst Stephen Blank suggests that the U.S.-Russia "reset" of relations being undertaken at the time of the release of the strategy led to the removal of explicit references to the United States as a threat. He suggests, however, that the strategy remains a largely conservative document opposed to Serdyukov's military reforms (although Serdyukov endorsed the threat assessment presented by the strategy), which was written by military officers and security officials who retained Soviet-era views of threats.⁴ German analyst Henning Schröder appears to take a different view, stating that the strategy seems to be "written by several authors whose threat perceptions diverge radically." He argues that the presentation of possible threats to national security—including the Federal Security Service's fear of spies, the military's fear of NATO, the economists' concern for economic development, and the elite's fear of social unrest—provides "no clues as to which of the competing ... risk perceptions will determine the future course of politics."⁵

Military Doctrine

President Medvedev approved a new military doctrine on February 5, 2010. The doctrine has legal force as state policy and in principle dictates decisions on capabilities. The doctrine qualifies language it repeats from the previous 2000 doctrine—that the threat of large-scale war is reduced—by raising concerns that "dangers" are increasing that could develop into threats. The 2010 doctrine follows the 2009 national security strategy in mentioning NATO as a "danger" because of its enlargement to states bordering Russia and its assumption of out of area missions. Other dangers include the development of strategic missile defenses and conventional precision strike weapons, including cruise missiles.

The doctrine calls for Russian troops to be used abroad to protect Russian interests and uphold international security. Legislation in October 2009 had provided for the Federation Council to authorize the use of troops abroad to protect its "peacekeepers" and citizens, and to combat piracy at sea, making it somewhat easier for Medvedev to call for such deployments. The protection of

⁴ Stephen Blank, "'No Need to Frighten Us, We Are Frightened of Ourselves,' Russia's Blueprint for a Police State, the New Security Strategy," in Stephen Blank and Richard Weitz, eds., *The Russian Military Today and Tomorrow*, pp. 19-149.

⁵ Henning Schröder, "Russia's National Security Strategy to 2020," *Russian Analytical Digest*, June 18, 2009.

Russian citizens abroad reflects a greater emphasis on forward-basing in former Soviet republics that are regarded as within a privileged sphere of influence, according to some observers.

The new doctrine repeats nearly verbatim language—with perhaps one significant change—contained in the 2000 doctrine emphasizing nuclear retaliation in case of nuclear attack. There had been speculation before the release of the doctrine that it might elevate the concept of preemptive nuclear strikes, but these are mentioned only as contingencies in cases where nonnuclear weapons of mass destruction are used against Russia “and/or against its allies, as well as in cases when aggression against the Russian Federation with the use of conventional weapons endangers the very existence of the [Russian] state.”⁶ The perhaps one significant change may be the language permitting use in cases when the “very existence” of the Russian state is threatened. This language may narrow the circumstances under which such weapons could be used, since the 2000 doctrine permitted their use “in situations critical to the national security” of Russia. In any event, the doctrine continues to authorize the possible first use of nuclear weapons during an ongoing conflict.⁷

The national security strategy and its theoretically supporting foreign policy concept (and other foreign policy pronouncements) appear less militaristic than the military doctrine. The national security strategy raises the possibility of improved U.S.-Russian ties, perhaps reflecting the early period of the bilateral “reset,” while the latter does not.⁸ Because of this, some observers suggest that some elements of the military doctrine were written before the national security concept. According to analyst Kiers Niles, the military doctrine largely fails to reflect the military reforms launched a year before the doctrine’s release. The doctrine discusses the mobilization of reserves, although the military reforms greatly reduce the necessity of such mobilization by shifting to fully manned brigades. The doctrine also fails to reflect experience gained in combating insurgency in the North Caucasus. In this view, the doctrine continues to call for the armed forces to be prepared to project great power status worldwide and fight major land battles in Europe and Asia.

Serdyukov’s Defense Reforms

In February 2007, then-President Putin appointed Anatoly Serdyukov as defense minister, a position that Serdyukov retained after Medvedev was elected president the next year. Many observers supposed that Serdyukov was chosen to carry out an wide-ranging anti-corruption campaign in the armed forces, since he had a nonmilitary career in accounting. In early to mid-2008, however, Serdyukov began calling for reducing the size of the armed forces and other reforms. These initiatives were opposed by Army General Yuriy Baluyevskiy, then-chief of the General Staff, who was relieved in July 2008 by President Medvedev and replaced by Army General Nikolay Makarov. Some of Baluyevskiy’s associates also resigned or were ousted, creating command uncertainties on the eve of the August 2008 Russia-Georgia conflict (as mentioned below, Baluyevskiy remained somewhat influential in his new assignment as the deputy chairman of the Security Council).

⁶ The Kremlin, President of the Russian Federation, “*The Military Doctrine of the Russian Federation*,” *Approved by Russian Federation Presidential Edict on 5 February 2010*, February 5, 2010. For an English language text, see Open Source Center (OSC), *OSC Feature*, February 9, 2010, Doc. No. FEA-1280.

⁷ See CRS Report RL32572, *Nonstrategic Nuclear Weapons*, by Amy F. Woolf.

⁸ Kiers Giles, “The Military Doctrine of the Russian Federation 2010,” *NATO Research Review*, February 2010.

The August 2008 Russia-Georgia conflict revealed a need to decisively revamp war-fighting capabilities. According to analysts Dale Herspring and Roger McDermott, the conflict forced the Russian government to realize that “the forces currently at the state’s disposal were in no condition to fight a modern war.”⁹ The U.S. think-tank STRATFOR has stated that “command, control and communications; intelligence, surveillance and reconnaissance; [and] joint planning and operations were either not evident during the [conflict] or were executed ineffectively,” by Russian invading forces. STRATFOR suggests that the Russian air force lacked basic intelligence necessary for targeting, including for the suppression of Georgian air defenses, and that there was a general failure of secure tactical communications necessary for command and control. The United Kingdom-based International Institute for Strategic Studies likewise has stated that the poorly executed Russian invasion of Georgia “increased doubt that the military could be seen as a reliable instrument to support Russian foreign- and security policy objectives, and also reinforced the perception that the armed forces could not in the future guarantee reliable conventional defense capabilities.”¹⁰

Russian media reported that in September-October 2008, President Medvedev and Defense Minister Serdyukov discussed a radical military reform plan with military officers and State Duma deputies. According to one account, in mid-September 2008 Medvedev decreed the launching of these new military reforms.¹¹ On September 26, 2008, Medvedev specified that the reform called for creating permanent combat-ready military units, improving command and control, bolstering personnel training, equipping the armed forces with new weapons, and increasing salaries and benefits, and he directed military officials to work out how to implement the plan by the end of the year. A few days later, he also stated that the reforms would involve strengthening the Strategic Rocket Forces and the Navy, creating aerospace defense forces, and bolstering rapid reaction forces. On October 14, 2008, Serduyukov announced more details of the reform plan (see directly below).

In his November 5, 2008, address to the legislature, Medvedev announced that he had ordered a “new configuration for our country’s armed forces,” and a rearmament effort because of military shortcomings that were exposed by the August 2008 Russia-Georgia conflict and ongoing efforts by the United States to create global missile defenses, encircle Russia with military bases, and expand NATO.¹² According to some observers, Russia’s experiences in combating separatism and terrorism in the North Caucasus also motivated the reform effort. The promotion of Lieutenant General Vladimir Shamanov—a veteran of combat in Russia’s breakaway Chechnya region and in Georgia during the 2008 Russia-Georgia conflict—as the commander of the Russian Airborne Forces in 2009 exemplified these motivations, according to these observers.

In December 2008, Serdyukov openly stressed that the reforms were intended to switch from a mass mobilization army for vast land, sea, and air wars to “a performance-capable, mobile, and maximally armed army and navy ready to participate in three regional and local conflicts, at a minimum.”¹³ Some observers suggested that the reforms were patterned after the U.S. military

⁹ Dale Herspring and Roger McDermott, “Serdyukov Promotes Systemic Russian Military Reform” *Orbis*, Volume 54, Issue 2, 2010, pp. 295-296.

¹⁰ “Russia-Geo War Lessons,” *STRATFOR*, February 12, 2009; “Russia,” *The Military Balance*, International Institute of Strategic Studies, February 3, 2010, p. 211.

¹¹ Pavel Felgenhauer, “A Profound Change in the Russian Military May Be Happening as the Power of the General Staff is Undermined,” *Perspective*, April 2, 2009.

¹² *CEDR*, November 5, 2008, Doc. No. CEP-950418.

¹³ *CEDR*, December 24, 2008, Doc. No. CEP-358019. Reportedly, Major-General Vladimir Zolotarev (retired), the (continued...)

force structure. Defense Ministry civilian adviser Vitaliy Shlikov explicitly stated that the military education reforms were designed to “match the more effective American model.”¹⁴

As set out by Serdyukov and other officials in October 2008, the reform plan called for reducing the total size of the armed forces from 1.2 million in 2008 to under 1 million by 2012. Three major initiatives were launched:

- Accelerating planned cuts in the officer corps to reduce their numbers from 355,000 to 150,000. Serdyukov lamented that the current structure of the military was “like an egg, swollen in the middle, we have more colonels and lieutenant-colonels than junior officers,” and that the ratio of officers to troops had dwindled in recent years. The reform plan also included abolishing the noncommissioned officers’ ranks of warrant officer and midshipman in the Russian Army and Navy. The bulk of these 140,000 NCOs—many or most of which were conscripts who had received little specialized training—would be replaced by 78,000 newly trained sergeants. Among other personnel changes, the number of officials and officers at the Defense Ministry and General Staff would be cut.
- Consolidating partially manned units and reducing the four-tier command system of military districts, armies, divisions, and regiments to a basic two-tier system of strategic commands and fully manned brigades that could be deployed for combat operations within a few hours (termed “permanent readiness brigades”).
- Sharply reducing the number and revamping the system of higher military education and training.

During 2009, the brigade system for ground forces was set up and other reforms were carried out. The reforms fundamentally affected the Ground Forces, reducing them in size from about 400,000 to 270,000 troops, converting 203 partially staffed divisions to 85 brigades, and eliminating 20,000 of 22,000 tanks.¹⁵ The Air Force and Navy were somewhat less affected by restructuring. Except for the move of the Navy headquarters to St. Petersburg, there was not an emphasis on opening new naval bases, but rather on boosting the acquisition of ships and submarines.

On March 5, 2010, President Medvedev claimed that the armed forces reorganization had been completed and that personnel had been successfully reduced to 1 million. He stated that improving the combat readiness of combined-arms forces in their new organizational and staffing structure would be the focus in 2010, as well as the development of a 10-year plan for weapons modernization. However, authorities and observers highlighted many ongoing challenges, including problems with contract troops and the size of the officer corps, and with supplying the new brigades with adequate weaponry.

(...continued)

Deputy Director of the Russian Academy of Sciences United States and Canada Institute, rejected Serdyukov’s statement, and asserted that the then-operative 2000 Russian defense doctrine called for the armed forces to be capable of both repulsing aggression in local and large-scale war.

¹⁴ Pavel Felgenhauer, “A Profound Change in the Russian Military May Be Happening as the Power of the General Staff is Undermined.”

¹⁵ Pavel Baev, “Military Reform Against Heavy Odds”; *CEDR*, February 25, 2011, Doc. No. CEP-37011.

The Reversal in Policy Over Contract Troops

Army General Makarov, Chief of the General Staff, admitted in February 2010 that the transition to professional (contract) soldiers had largely failed, and that future contracting would focus on NCOs. This most recent effort to increase the number of contract troops in the military had been launched by former President Putin in 2003. Critics argued that the sums paid to contractees were far below adequate wages, so that the quality and number of contractees had remained low. Critics also alleged that large sums in the 2004-2007 defense budgets for transitioning to contracts had been pilfered.¹⁶ In late 2010, a large number of contractees reportedly were discharged, reportedly leaving about 110,000 contractees, and Makarov announced that the number of draftees would be increased. Serdyukov stated that there was no money for contractees, and he and other military officials suggested that funding was being shifted to procure weapons and to boost the salaries of remaining contractees.¹⁷

The reduction in contractees was highly controversial, with influential military officials calling for new contracting efforts to obtain skilled personnel. Military officers belonging to the Airborne Troops, which contains five battalions largely made up of contractees serving as rapid reaction forces, were among those strongly objecting to the reductions. Many civilians also condemned the boost in conscription. In seeming response, in March 2011 President Medvedev approved raising the number of contract personnel to 425,000 by 2017.¹⁸

In late March 2011, General Makarov stated that the provision for 425,000 contract troops “is only the first stage” of reforms, and pointed to staffing in the Czech armed forces, which consists of about 10%-15% draftees, as the ultimate goal for the Russian military. He stressed that boosted pay and housing benefits will be essential to increasing the numbers of contractees in the Russian military. He explained that the previous contractees that had been let go “were mainly soldiers who had served for six months and who, through persuasion, coercion, and threats, were made to sign a contract. We clothed them and shod them as contractees and then ... they took off,” at the end of one year, ignoring their three-year obligation as contractees. A new process would be introduced, he stated, whereby the prospective contractees are trained and then offered contracts. He stated that there was a demographic need to shift to more contractees, since the pool of draft-age males was decreasing.¹⁹

Criticizing this apparent *volte face*, Russian military analyst Viktor Litovkin stated that “first the chief of General Staff says that we committed a monstrous mistake and that the federal targeted program for forming professional units has failed; therefore, we need to rid ourselves of contractors. Half a year passes, and the same chief of General Staff steps up to the podium, saying that it seems the country again needs 425,000 professionals.”²⁰

¹⁶ CEDR, June 24, 2010, Doc. No. CEP-358007.

¹⁷ ITAR-TASS, October 4, 2010; CEDR, February 14, 2011, Doc. No. CEP-358016.

¹⁸ The Kremlin, President of the Russian Federation, *Expanded meeting of the Defense Ministry Board*, March 18, 2011, at <http://eng.kremlin.ru/news/1926>; *RIA Novosti*, March 18, 2011; Roger McDermott, “The Bear, the Abacus and Impossible Defense Computations,” *Eurasia Daily Monitor*, March 22, 2011.

¹⁹ CEDR, March 29, 2011, Doc. No. CEP-358007; Doc. No. CEP-358009; CEDR, July 11, 2011, Doc. No. CEP-358015.

²⁰ CEDR, May 11, 2011, Doc. No. CEP-358011.

The Reversal of Policy Over the Size of the Officer Corps

The planned reduction in the officer corps fueled large-scale resistance among active-duty officers and various unions and other military associations. Perhaps in the face of such resistance, in another apparent *volte face*, Serdyukov told the defense ministry collegium in mid-March 2011 that President Medvedev had approved an increase in the number of planned officers from 150,000 to 220,000 by 2012. He explained that these “additional” 70,000 officers would be highly qualified specialists needed by the newly created Aerospace Defense Command and other billets requiring high technology-savvy officers.²¹

In early July 2011, Serdyukov stated that the ranks of the 70,000 added officers could be filled from various sources, including from a group of 39,000 officers who had been taken off staff but had not been discharged, and remained “at the disposal of” the armed forces. Also, some lieutenants that had been serving as sergeants are being reinstated as officers. He stated that the Aerospace Defense Command would absorb about 40,000 of these added officers but that others would go to a number of missile brigades being established by two Strategic Missile Troops divisions and to several air defense regiments.²²

Goals for 2011

At a mid-March 2011 meeting of the Defense Ministry Collegium, President Medvedev set five reform tasks for 2011:

- to implement the new State Armaments Program;
- to enhance troop control, particularly at the level of strategic commands and armies;
- to create the Aerospace Defense Command by the end of the year;
- to strengthen defense of the country's borders, including eastern borders (presumably with China);
- to give “undoubted priority” to social guarantees for servicemen and military pensioners.

He pledged that a lieutenant’s pay would be increased to 50,000 rubles a month (about \$1,800) at the beginning of 2012 and that average pensions would be increased by at least 60%. Serdyukov proclaimed at the meeting that “the first most difficult stage” of modernizing the armed forces had been completed with the creation of brigades, the improvement of logistics, combat readiness and training, the boosting of modern weapons procurement (which he claimed now accounted for 15% of the arsenal), and the construction of new housing for officers.²³

As pointed out by Russian military analyst Pavel Felgenhauer, however, “Russia’s inventory of nonstrategic weapons has never been officially published. Serdyukov announced some meaningless overall figures of ‘new weapons’ procured in 2010, not disclosing any information

²¹ CEDR, March 29, 2011, Doc. No. CEP-358007.

²² CEDR, March 9, 2011, Doc. No. CEP-358001; July 6, 2011, Doc. No. CEP-358004.

²³ CEDR, March 18, 2011, Doc. No. CEP-37003.

about what types and if they are indeed ‘modern.’ Almost total secrecy makes any attempt at an independent analysis of procurement or military reform a guessing game in Russia.”²⁴

In late March 2011, at a meeting of the Academy of Military Sciences, a Russian think tank, Makarov blamed Russia’s past failures to modernize its armed forces on the incompetence of military think-tank planners. The results of “new-generation maneuvered defense, exclusively professionally trained armed forces, and network-centric warfare,” first highlighted by the multinational Persian Gulf War in 1990-1991, were unheeded by these planners, who instead remained fixated on “large-scale linear actions by multi-million [man] armies” and on the “procurement of obsolete arms.” He stated that the Russia-Georgia conflict in 2008 had finally forced the military to implement reforms, “even in the absence of a sufficient scientific-theoretical basis.” He appeared to highlight this “absence” as a reason for the seemingly *ad hoc* nature of some of the reform efforts.²⁵

Force Structure

The Commander-in-Chief of the Armed Forces, the Ministry of Defense and the General Staff

Under Serdyukov’s reforms, the responsibilities and staffing of the Ministry of Defense and the General Staff changed, with many observers suggesting that the Ministry of Defense under Serdyukov gained more power to implement reforms through personnel changes among the General Staff and officer corps.

Under the Russian constitution, the president is the commander-in-chief of the armed forces. He forms and heads the Security Council, approves the military doctrine, appoints and dismisses the top commanders of the armed forces, and confers higher military ranks. According to the president’s website, as commander-in-chief, he

endorses ... the concept and plans for building the Armed Forces, economic mobilization plans, civil defense plans and other laws and regulations involving military organization. The head of state also endorses all arms-related regulations and the regulations of the Ministry of Defense and the General Staff. The Minister of Defense and the Chief of the General Staff are directly subordinate to the President. The President issues annual decrees concerning the draft and the reserves, and signs international treaties on joint defense and military cooperation.²⁶

The constitution and the 1996 law on defense provide for scant legislative oversight over the Ministry of Defense or defense budgets, although defense ministers occasionally discuss defense-related legislation and defense policy with the legislature.²⁷

²⁴ Pavel Felgenhauer, “No Good Men, Weapons or Understanding of Modern Warfare in Russia,” *Eurasia Daily Monitor*, March 31, 2011.

²⁵ *CEDR*, March 29, 2011, Doc. No. CEP-950141.

²⁶ The Kremlin, President of the Russian Federation, *Authority and Duties: Commander-in-Chief of the Armed Forces*, at <http://archive.kremlin.ru/eng/articles/president06.shtml>.

²⁷ Mark Smith, “The Politics of Security,” in Mark Galeotti, ed., *The Politics of Security in Modern Russia* (Surrey, United Kingdom: Ashgate, 2010), p. 41.

The Ministry of Defense provides civilian control over the military. Serdyukov is a civilian, as is a majority of the deputy ministers. In late June 2011, Russian media reported that the ministry had launched an effort to replace military officers or otherwise increase the number of civilians in the ministry.²⁸

In the past, the General Staff, composed of the service and arms chiefs, had substantial operational control over military affairs. Amendments in 2004 to the law on defense strengthened the role of the Defense Ministry vis-a-vis the General Staff by specifying that the chiefs of the army, navy, and air force would report directly to the defense minister, and could not bypass the defense minister and report only to the president. However, until Serdyukov was appointed, the General Staff retained much of its previous power. President Medvedev stated in June 2008 that he was replacing Balyuevskiy with Makarov as chief of the General Staff at Serdyukov's request, a sign that the General Staff "is now firmly subordinated to the defense ministry."²⁹ Under Serdyukov's military reforms, the General Staff has been downsized and has become primarily responsible for defense research, education, and liaison with foreign militaries. The General Staff's prestigious Center for Military-Strategic Research, which has been responsible for developing defense policy, has been retained but subordinated to the General Staff Academy.

The Main Intelligence Directorate (GRU) long has constituted a major element of the General Staff's power as the "brain of the army." Some Russian analysts have argued that to reduce the power of the General Staff, the GRU should be removed from its control.³⁰ Perhaps in an attempt to reduce the General Staff's power, in early 2010 the Spetsnaz (special forces) brigades subordinated to the GRU were partially reassigned to Ground Forces. However, in March 2011 the Spetsnaz brigades reportedly were resubordinated to the GRU, perhaps indicating an ongoing struggle for power between the Defense Ministry and the General Staff.³¹ The General Staff explained the return of Spetsnaz to the GRU as due to the growing risk of instability in Afghanistan and Pakistan, which might affect the "Central Asian axis," and increase the need for effective and covert action.³²

In February 2011, General Makarov stated at a meeting of reserve officers from Moscow and the Central Federal District that "there is no improvisation in military reform. Serdyukov and I have a clear month-to-month plan for military reform to the year 2020. And we will not retreat from it one micron."³³ Some observers claimed that this statement demonstrated the subordination of the general staff to the defense minister. However, other analysts argued that it was an assertion that the General Staff and the Defense Ministry were equal partners in carrying out reforms. These analysts have pointed to the moving of Spetsnaz brigades back to the GRU and to Makarov's call

²⁸ CEDR, June 27, 2011, Doc. No. CEP-358010.

²⁹ Mark Smith, "The Politics of Security," p. 47.

³⁰ Felgenhauer, "A Profound Change in the Russian Military May Be Happening as the Power of the General Staff is Undermined."

³¹ Roger McDermott, "Bat or Mouse? The Strange Case of Reforming Spetsnaz," *Eurasia Daily Monitor*, November 24, 2010; *Russia's Conventional Military Weakness and Substrategic Nuclear Policy*, U.S. Army, Fort Leavenworth, Kansas, Foreign Military Studies Office, n.d., p. 16; "Defense Ministry Reversal on Spetsnaz," *Russian Defense Policy*, March 25, 2011, at <https://russiandefpolicy.wordpress.com/tag/gru/>. A *New Times* article in February 2011 claimed that various political interests hostile to the GRU have vitiated the GRU's intelligence-gathering and analysis functions. CEDR, February 22, 2011, Doc. No. CEP-358019.

³² CEDR, March 24, 2011, Doc. No. CEP-358002.

³³ "Veterans," *VIKNO News Service*, February 22, 2011, at <http://vikno.eu/eng/politics/politics/veterans.html>; CEDR, July 5, 2011, Doc. No. CEP-358023.

for the Aerospace Defense Forces to be subordinate to the General Staff as indications that it aims to assert some operational powers.

The Security Council—composed of the president, prime minister, and top security and foreign affairs officials—is a consultative body tasked with threat assessments, doctrine formulation, and force structure planning. After President Medvedev removed Baluyevskiy as chief of the General Staff and appointed him to the Security Council, several Russian analysts suggested that the Security Council was a sinecure for military and security officials on their way to retirement. Its limited role also may have been indicated during the August 2008 Russia-Georgia conflict, when the Security Council met on the second day of warfare, after Medvedev had already directed the engagement of Russian forces against Georgia. However, the Security Council appeared influential in brokering agreement on the new national security strategy and military doctrine.³⁴

An edict on the Security Council issued by President Medvedev in early May 2011 appeared to strengthen the role of the presidential administration in overseeing military affairs. The edict clarified that the Security Council examines issues and prepares “presidential decisions” on the “organization of defense, military organizational development, defense production, and military and military-technical cooperation of [Russia] with foreign states.” Perhaps a new function related to combating corruption, the Security Council “organiz[es] the monitoring of targeted expenditure of budgetary appropriations envisaged in the federal budget for the relevant year for funding expenditures for national defense.” An Interdepartmental Commission for Military Security composed of government officials serving in a voluntary capacity is established under the Security Council to assist in carrying out these functions. The status of the secretary of the Security Council appears to be strengthened. He “monitor[s] implementation of Security Council decisions and monitor[s] activities of the ... Armed Forces, other troops, military force elements, and entities ... [and] submit[s] an annual report to the ... President on the status of national security and measures for strengthening it.”³⁵

Branches, Combat Arms of Service, Military Districts/Joint Strategic Commands, and Brigades

There are three military branches—Ground Forces, Navy, and Air Force—and three “combat arms of service” that are not under the command of the three branches. These include the Strategic Rocket Forces, Airborne Forces, and Military Space Forces. Serdyukov’s military reforms have affected all of the military branches and combat arms of service to various degrees, including the introduction of the brigade system in most of the branches and combat arms of service. In addition, the six existing military districts were consolidated into four larger military districts (termed Joint Strategic Commands during wartime operations) with new responsibilities, and a new command—Aerospace Defense—is being set up.

³⁴ Mark Smith, “The Politics of Security,” pp. 47-48.

³⁵ *CEDR*, May 11, 2011, Doc. No. CEP-37001. Observers have differed over whether or not the Security Council is strengthened under the new edict. *CEDR*, May 10, 2011, Doc. No. CEP-349001; May 10, 2011, Doc. No. CEP-964052; May 11, 2011, Doc. No. CEP-358007; *Interfax*, May 10, 2011.

Table I. Russia's Military Leadership

Commander-in-Chief of the Armed Forces:	President Dmitry Medvedev
Minister of Defense	Anatoly Serdyukov
Chief of the General Staff / First Deputy Minister of Defense:	Army General Nikolay Makarov
First Deputy Minister of Defense:	Aleksandr Sukhorukov (procurement)
Deputy Minister of Defense/State Secretary:	Army General (retired) Nikolay Pankov
Deputy Minister of Defense:	Army General Dmitriy Bulgakov (logistics)
Deputy Minister of Defense:	Anatoliy Antonov (international military cooperation)
Deputy Minister of Defense:	Dmitriy Chushkin (information and telecommunications)
Deputy Minister of Defense:	Tatiana Shevtsova (construction)
Deputy Minister of Defense:	Mikhail Mokretsov (finance; head of the ministry secretariat)
First Deputy Chief of the General Staff / Chief of the Main Operations Department:	Colonel General A. S. Rukshin
Commander-in-Chief of the Russian Ground Forces:	Colonel General Aleksandr Postnikov
Commander-in-Chief of the Russian Air Force:	Colonel General Aleksandr Zelin
Commander-in-Chief of the Russian Navy:	Admiral Vladimir Vysotsky
Commander, Strategic Rocket Forces:	Lieutenant-General Sergey Karakaev
Commander, Space Forces:	Lieutenant-General Oleg Ostapenko
Commander, Airborne Forces:	Lieutenant-General Vladimir Shamanov
Commander, Joint Strategic Command West:	Colonel General Arkadii Bakhin
Commander, Joint Strategic Command South:	Lieutenant General Aleksandr Galkin
Commander, Joint Strategic Command Central:	Lieutenant General Vladimir Chirkin
Commander, Joint Strategic Command East:	Admiral Konstantin Sidenko

Source: Russian Ministry of Defense.

Aerospace Defense Operational-Strategic Command

In November 2010 in his address to the Federal Assembly, President Medvedev called for aerospace defenses to be unified under a single command by the end of 2011, and in March 2011 specified that “existing systems of air and missile defense, missile attack warning, and space surveillance are to be united.” The kernel of the new force is the Aerospace Defense Operational-Strategic Command, formerly the Moscow Air Defense District Special Purpose Command. The current commander of the Aerospace Defense Operational-Strategic Command, Lieutenant-General Valeriy Ivanov, stated in May 2011 that he envisaged the main function of the command to be “to detect the initiation of an attack and to warn the state leadership in order to facilitate further decisions to detect, destroy, suppress, or close down the assets.”³⁶ In June 2011, he led a

³⁶ CEDR, May 16, 2011, Doc. No. CEP-358008.

planning exercise in Moscow on shooting down air attackers. After extensive inter-service wrangling, it has appeared that the command will be merged with the Military Space Forces, recreating in some form the aerospace defense structure that existed in 1967-1982. S-400 missile systems and follow-on planned S-500 systems are to form the basis of the Command. Some military planners appear to view the development of the S-500 surface-to-air missiles by the Almaz-Antey Air Defense Open Joint-Stock Company as necessary to the effectiveness of the new command. Reportedly, however, the S-400 long-range (250-mile) missile and the S-500 are years from development.

In late May 2011, Major-General Igor Anatolyevich Sheremet, Deputy Chief of the General Staff and Chairman of the General Staff's Military-Science Committee (see below, "Weapons Modernization"), stressed that the creation of the Operational-Strategic Command of Aerospace Defense was a fundamental part of Serdyukov's reforms. Seeming to indicate the Russian leadership's fears of a U.S. or NATO-led attack, similar to NATO actions against Serbia in 1999, he stated that "we foresaw, that by the 2020s there would be in the inventories of the Western countries on the order of 80,000 cruise missiles including on the order of 2,000 with nuclear capabilities." He warned that these cruise missiles could be used for "a decapitating strike ... against the upper level of command and control agencies. On the strength of this, the issue was raised and the corresponding documents were approved at the highest level on the creation of the Operational-Strategic Command of Aerospace Defense."³⁷ Other observers suggest that U.S. efforts to develop hypersonic military aircraft also spurred the creation of the new Command.³⁸

Military Districts/Joint Strategic Commands

In July 2010, President Medvedev decreed the creation of four military districts (which would be termed Joint Strategic Commands during wartime operations) to replace the Soviet-era distribution of equipment and manpower among the former six military districts. Some Russian analysts compared these new commands to those in the U.S. and other Western militaries (except that, according to Russian military doctrine, the role of the military districts/JSCs are to defend Russia against foreign invasion).³⁹ The new military districts/JSCs are the Central, Eastern, Southern, and Western (see the Ministry of Defense, Russian Federation, at <http://eng.mil.ru/en/index.htm>). Center Command controls the former Volga-Urals Military District and the western part of the Siberian Military District. Southern Command is in charge of the former North Caucasian Military District and the Black Sea Fleet and Caspian Flotilla. Eastern Command is in charge of the former Far Eastern Military District and the larger part of the Siberian Military District. Western Command controls personnel and equipment from the former Moscow and Leningrad military districts and the Northern and Baltic Fleets.

In late October 2010, Serdyukov announced that the military districts/JSCs had been established. Each of the four military districts/JSCs has its own commander with authority over personnel and equipment provided by the individual military arms and branches located within the command

³⁷ *CEDR*, May 31, 2011, Doc. No. CEP-37002. See also Army General Makhmut Gareyev, President of Academy of Military Sciences, "Creation of Aerospace Defense is a Most Important State Task: The Center of Gravity and Main Efforts of Armed Warfare Are Shifting into Aerospace," *CEDR*, May 31, 2011, Doc. No. CEP-358001. Gareyev called for the Aerospace Defense Command to be directly subordinate to the General Staff.

³⁸ Open Source Center, *China: Daily Report*, August 9, 2011, Doc. No. CPP-88002.

³⁹ Sergey Borisov, "Russian Armed Forces' Command 'to Follow U.S. Example'," *Russian Opinion and Analysis Review*, July 15, 2010; "World Armies: Russian Federation," *Jane's World Armies*, June 17, 2011.

area, which in theory will reduce the bureaucratic hurdles to warfighting. Troops of the Interior Ministry, the Emergency Situations Ministry, and the Border Guards that are located in a military district/JSC fall under the operational control of the commander, except for personnel belonging to the Strategic Rocket Forces, who remain under the direct authority of the president. Reportedly, the four new commanders of the military districts/JSCs formerly served with or under Makarov and are pro-reform.⁴⁰

Mission planning was transferred from the branches of service and the general staff to the military districts/JSCs, while training and armaments needs remain part of the responsibilities of the branches of service. In the case of Ground Forces, combat training, including some inter-branch training, and the training of junior specialists and NCO's, has been retained under the control of the Ground Forces Main Combat Training Directorate. Also, participation in peacekeeping activities and the planning of armaments needs has remained under the control of the Ground Forces Main Command.⁴¹

Brigades

To combat insurgency in the North Caucasus, two mountain warfare brigades had become fully operational by 2008. These brigades formed the template for Serdyukov's reform effort to introduce brigades throughout most of the armed forces by the end of 2009.⁴²

In the Ground Forces, Serdyukov reported that 85 brigades had been formed by the end of 2009, among them 39 combined-arms brigades (later mentioned as 47), 21 missile troops and artillery brigades, 7 army air defense brigades, 12 signal brigades, 2 electronic warfare brigades, and 4 air assault brigades. One Russian media source claimed in early 2011 that the brigades "are at 95-100% strength and are fully outfitted with military equipment and other material resources."⁴³

This optimistic assessment has been contradicted by Russian and other observers. Colonel General Alexander Postnikov, the commander-in-chief of the Ground Forces, testified to the Defense and Security Committee of the Federation Council in March 2011 that there were 70 Ground Forces brigades, and Russian defense analyst and State Duma member Alexey Arbatov suggested in April 2011 that there might only be 64 Ground Forces brigades.⁴⁴ Postnikov also reported that the readiness of the Ground Forces remained stymied by the fact that the vast majority of weaponry is aged and needs to be modernized. He also reported that a decision had been made in early 2011 to set up heavy, medium, and light combined-arms brigades in the Ground Forces, a decision seemingly linked to readiness issues. Heavy brigades will be equipped with tanks and tracked armored infantry fighting vehicles weighing up to 65 tons and will be

⁴⁰ Rod Thornton, *Military Modernization and the Russian Ground Forces*, SSI Monograph, Strategic Studies Institute, U.S. Army War College, June 2011, p. 26. In late 2010, Colonel Timofeyev, Commander of the 56th Guards Separate Air Assault Brigade, reported positively to President Medvedev that "whereas earlier there was ... a four-level system of command (regiment, division, army, district), now I, for example, report to the [Southern JSC] commander directly." CEDR, November 29, 2010, Doc. No. CEP-37011.

⁴¹ CEDR, February 23, 2011, Doc. No. CEP-358004; March 18, 2011, Doc. No. CEP-358013.

⁴² These were the 33rd and 34th Motorized Rifle (Mountain) Brigades of the former North Caucasus Military District. CEDR, July 24, 2007, Doc. No. CEP-436001; July 1, 2011, Doc. No. CEP-358007.

⁴³ CEDR, February 25, 2011, Doc. No. CEP-37011.

⁴⁴ Discussed in Roger McDermott, *Russia's Conventional Military Weakness and Substrategic Nuclear Policy*, U.S. Army, Fort Leavenworth, Kansas, Foreign Military Studies Office, n.d.

gradually modernized; medium brigades will be multirole and would feature armored vehicles still being designed; and light brigades will be ready for rapid deployment (but see below, “Implications for Russia”) and equipped with “Tiger” high-mobility multi-purpose vehicles. These latter brigades might also be used in mountainous or Arctic terrain.⁴⁵

The Airborne Forces of the Army, the main elite rapid-reaction force prior to the reforms, resisted the switch to the brigade structure and was exempted. Its current structure is 35,000 personnel in four airborne divisions (each with 2-3 regiments), one brigade, a communications regiment, and a reconnaissance commando regiment (Spetsnaz). Its commander reports directly to the defense minister and president, reflecting its special status in the armed forces as a rapid reaction force. Despite exemption from the shift to brigades, the Airborne Forces nevertheless have been heavily impacted by the reforms. The Commander of the Airborne Forces, Lieutenant-General Vladimir Shamanov, reported in late July 2011 that readiness remained below what it was before the reforms began, since the number of conscriptees in the Airborne Forces had risen to 69% of personnel. He stated that his goal for the Airborne Forces was a minimum of 50% contract personnel. To maintain some rapid-reaction capabilities, several airborne and air assault battalions had been formed in 2010 that were staffed with 70% contract personnel.⁴⁶

Manpower Levels and Training

According to General Makarov, as an interim outcome of the reforms, in mid-2011 there were 184,000 contract troops and about 600,000 conscripts, with the number of officers rising from 150,000 to 220,000 by 2012.⁴⁷ However, these publicly released numbers fall somewhat below the level of 1 million personnel, fuelling suggestions by some observers that the armed forces is actually below 1 million personnel. These observers question whether this number of conscripts has been attained, given lower levels of actual reported recruitment, and whether it has been possible quickly to bolster the number of contractees (see below, “Demographics and Quality of Personnel and Training”). With the planning for 425,000 contractees by 2017, the possible number of required conscriptees then required might be around 355,000.

Reserve Forces

As noted above, the reforms call for the creation of fully manned brigades able to be deployed for combat operations within a few hours under the concept of “permanent readiness,” which implies that the need for the mass mobilization of reserves is supposedly greatly reduced. However, the existing mobilization system has been only partially restructured and its ultimate status is unclear. Some elements of the military continue to call for the preservation of a substantial mobilization capability.

⁴⁵ Roger McDermott, “The Bear, the Abacus and Impossible Defense Computations,” *Eurasia Daily Monitor*, March 22, 2011; *CEDR*, March 15, 2011, Doc. No. CEP-37008. While Postnikov testified that 80% of Ground Forces weaponry needed modernized, others have suggested that the portion of modern weapons and equipment is slightly more than 10%, although some units have a higher percentage of “new” materiel than others.

⁴⁶ “World armies: Russian Federation,” *Jane’s World Armies*, June 17, 2011; *CEDR*, August 2, 2011, Doc. No. CEP-358005; Roger McDermott, “Russian Armed Forces Reform: VDV Experiences Zero Progress,” *Eurasia Daily Monitor*, August 9, 2011.

⁴⁷ *CEDR*, July 8, 2011, Doc. No. CEP-358021.

Under the military reforms, responsibility for training reservists was assigned in 2010 to the commander of the military districts/JSCs, eliminating the practice of reservists being trained within brigades and other units upon call-up for up to 60 days of service. There reportedly are about 20 million former military personnel in reserve, 10% of whom have seen active service within the last five years. Reportedly, the reserve system is in collapse, suffering from equipment pilferage and scant involvement of reservists in refresher training. In February 2011, Makarov denied that the reserve system had been “destroyed,” stating that a mass mobilization could result in the manning of 180 brigades. These brigades are only partly manned “in peacetime” but quickly can come to full strength in case of a threat with the inclusion of reservists, he claimed. He admitted that currently these “peacetime” brigades needed a full complement of combat equipment. Some observers questioned how Makarov arrived at the figure of 180 brigades and raised concerns that plans were unclear on who would update the training of reserve troops and officers in case they were mobilized.⁴⁸ A mobilization brigade is being created on an experimental basis to participate in the “Center 2011” military exercise scheduled for September 2011.

After months of discussion, a government-backed bill to create an active reserve was submitted to the Russian Duma in early July 2011. It calls for phasing in an active reserve over the next three years. During the phase-in period, 332 former officers and 3,968 former privates and sergeants who volunteer are to sign three-year contracts in 2011 to participate in regular training and exercises, and to be eligible for call-up for extended active duty if required. The reserve officers and sergeants would be paid about \$400-\$500 per month. The budget to create an active reserve was set at \$15.8 million for 2011, with a gradual increase to \$34.6 million in 2014 to cover 8,600 active reservists.⁴⁹

Military Education and Training

Even before the August 2008 Russia-Georgia conflict that spurred reform efforts, President Medvedev had issued a decree in July 2008 that directed the closure or consolidation of 65 military higher educational institutions to 10 (later changed to 16) large training centers dispersed to various parts of the country. These include 3 military training and science centers for officer training for each branch of the armed forces, 11 military academies, and 2 military universities. All former higher military academies and military institutes, including military science research organizations, were subordinated to these 16 schools, and the number of these institutes and organizations are planned to be reduced by 2013. Because the military reforms had resulted in thousands of officers relieved of duty but retained in a pool for possible reassignment, general admissions of officer candidates to military higher educational institutions were sharply reduced in the autumn of 2010, with only some admissions occurring for limited specialties.⁵⁰

In early 2011, General Makarov stated that troop and officer training for permanent operational readiness is being worked out. He admitted that improving such readiness among the troops and officers has required “the reworking of all the guidance documents, instructions, regulations, and teaching aids, which were still geared to past wars. We have already reworked them four times in

⁴⁸ CEDR, February 10, 2011, Doc. No. CEP-950215; January 26, 2011, Doc. No. CEP-358004.

⁴⁹ CEDR, July 6, 2011, Doc. No. CEP-950186; July 11, 2011, Doc. No. CEP-964151.

⁵⁰ CEDR, June 2, 2011, Doc. No. CEP-358007.

the recent past but are not yet satisfied. And only by the end of 2011 will we hopefully be able to get them up to scratch.”⁵¹

In the context of creating permanent readiness units that are fully manned, the failure of the contract system has meant that conscription remains the major source of soldiers. The shift to one-year terms of conscription raised the need for enhanced training and supervision by a professional corps of NCOs, particularly since hazing among conscriptees remained a serious problem.⁵²

To address the need for noncommissioned officers (NCOs) with adequate training, Serdyukov reassigned 5,000 junior officers who had graduated in 2009-2010 to serve as NCOs. He also reorganized the Ryazan Airborne Troops Higher Command School to train senior and staff sergeants, which is to graduate its first class of 240 in 2012. These trainees have signed contracts to serve for five years. Recognizing the urgent need for more NCOs, the Ryazan School began training conscripts in autumn 2010 under a three-month program. Other military educational institutions that would temporarily not be training officer-candidates also switched to NCO training. Programs were geared to two years for senior sergeants and 5-10 months for other sergeants. It was envisaged that 5,000-10,000 sergeants trained under the 10-month program would be available in 2011-2012. Those admitted included former sergeants and warrant officers, who are being retrained; former conscripts in the reserves; and active duty contractees.⁵³

The Soviet-era Voluntary Society for the Promotion of the Army, Aviation, and Navy (DOSAAF), an ostensibly private organization—actually affiliated with the Communist Party—survived fitfully in post-Soviet Russia (although it was renamed) to provide some paramilitary training to secondary school-age youth. In 2009, however, the organization reassumed its former moniker as part of the reform process to revitalize pre-induction training in the face of the reduction of the length of conscription to one year. In May 2011, deputy head of the General Staff Vasilii Smirnov hailed DOSAAF for providing training beneficial to 64,000 individuals who would join the armed forces in 2011, and called for the expansion of DOSAAF training by making it part of the secondary school curriculum.⁵⁴ Russian commentators Viktor Baranets and Colonel (Retired) Mikhail Timoshenko likewise called for strengthening pre-draft military training through DOSAAF and other means, so that “the lads will not arrive at the [military] training school like blind kittens,” but argued that pre-draft training still would not permit inductees to become fully proficient in one year of service. Instead, they called for at least two years of service on national security grounds.⁵⁵

As part of the effort to enhance pre-induction training and to increase the attractiveness of military careers, President Medvedev decreed in March 2010 the setting up of eight “presidential cadet schools” for servicemen’s children and orphans. The first opened in Orenburg, Russia, in September 2010 with a planned 800 students, and the second is scheduled to open in Tula, Russia, in 2012.

⁵¹ *CEDR*, February 23, 2011, Doc. No. CEP-358004.

⁵² *CEDR*, August 19, 2010, Doc. No. CEP-358004.

⁵³ *CEDR*, January 19, 2010, Doc. No. CEP-358016; January 20, 2010, Doc. No. CEP-358012; February 1, 2010, Doc. No. CEP-1002; June 29, 2010, Doc. No. CEP-950306.

⁵⁴ *CEDR*, May 12, 2011, Doc. No. CEP-950241.

⁵⁵ *CEDR*, May 20, 2011, Doc. No. CEP-358003; *ITAR-TASS*, August 25, 2010.

Weapons Modernization

Weapons modernization has been a fundamental aspect of recent reform efforts. Russia has attempted to maintain the Soviet-era objective of manufacturing all the weapons used by its armed forces, although these efforts have faced extreme challenges. The break-up of the Soviet Union resulted in many production facilities coming under the sovereignty of newly independent republics, but in many cases Russia has endeavored to establish business relations with these firms or to reassume ownership over them for supply chain purposes. The 2010 military doctrine calls for ensuring “the technological independence of [Russia] in the sphere of production of strategic and other models of armaments and military and specialized equipment in accordance with the state arms program.” Nonetheless, some significant foreign weapons and components purchases have occurred (see below, “Foreign Arms Technology Purchases”).

There are about 1,500 Russian defense research institutes, design bureaus, and industries, all of which are either partly or wholly owned by the state. According to some reports, defense industries employ up to 3 million workers (about 4% of the labor force), and combined revenue of the top 20 firms or groups of firms was nearly \$20 billion in 2009.⁵⁶ The government has undertaken to consolidate defense industries by grouping them by product lines into holding companies. Among recent holding companies being set up are several dealing with the outsourcing of functions that are deemed to be not an inherent part of military duties, such as growing crops for the military and other food services, laundry services, repairs of facilities and weapons, and housing. Most of the holding companies have revenues of less than \$1 billion per year, making them unable to invest substantial sums to develop new technologies. The holding companies have substantially raised the prices they charge the government, which has led the government to contest the mark-ups (see below, “Weapons Production and Procurement Challenges”).

In an effort to consolidate many defense and nondefense high-technology firms, the Rostekhnologii (Russian Technologies) State Corporation was established under legislation approved in December 2007. Then-President Putin named former KGB associate Sergey Chemizov to head Rostekhnologii. In legal form, the state corporation is substantially under government control although its assets are technically private. It is not subject to the bankruptcy law and has limited reporting requirements, but it does submit annual and auditors’ statement to the government. The former defense holding company headed by Chemizov—Rosboroneksport (Russian Arms Exports)—became a major subsidiary of Rostekhnologii. By December 2010, Rostekhnologii had taken over 580 defense and nondefense firms and reportedly employed 780,000 workers. In mid-2011, the law on the formation of Rostekhnologii was changed to extend its period of formation until 2013. The goal in forming Rostekhnologii is to boost the high-technological transformation of defense and nondefense industries, foster sales of high-technology goods in domestic and foreign markets, and attract investment. Rostekhnologii has stepped up foreign defense technology transfers, including joint ventures and the purchases of components and maintenance services.

After declining in the 1990s, defense industrial production increased somewhat in the 2000s, due to boosted military procurement orders and arms exports. Nonetheless, production remained far

⁵⁶ “Russian Defense-Industrial Complex Companies Ranking for 2009,” *New Defense Order Strategy*, September 2010, p. 43.

below that of the Soviet period. According to many analysts, Russian state-controlled defense industries face dim prospects since they are producing arms largely based on Soviet-era designs and technology, most of their employees are reaching retirement age, their production assets are aged, their management is inefficient, and up to one-third are effectively bankrupt. Also, they lack relationships with Western defense firms that can provide technology exchanges.⁵⁷

The ongoing crisis of the defense industrial sector was illustrated at the end of 2008, when Prime Minister Putin announced an emergency \$1.7 billion infusion of funds to stave off the bankruptcies of several defense firms.⁵⁸ A Rostekhnologii official verified in December 2010 that a large number of the mainly defense firms it had taken over were effectively bankrupt because of mismanagement, corruption, “problems with the state defense order, the obsolescence of fixed production capital, [and] technological backwardness.” For example, he stated that when the corporation had assumed ownership over the Izhmash holding company (manufacturer of the Kalashnikov rifle and other weapons), which he described as the “flagship” of Russia’s defense industries, it discovered that “the general director, incompetently managing the business, ... had reduced not only the parent plant but also a number of Izhmash group enterprises to a state verging on bankruptcy.”⁵⁹

Lieutenant General Sergey Karakayev, commander of Strategic Rocket Forces, has stressed that Serdyukov’s reforms aim to protect Russia’s offensive nuclear weapons capabilities, and that procurement is prioritized to maintain and modernize these forces. He has argued that nuclear forces will remain the most important deterring factor during the reform of the conventional armed forces. German defense analyst Margarete Klein asserts that because Russia continues to give priority to maintaining parity in strategic nuclear weapons with the United States, and to devote most budgetary resources to this effort, the modernization of conventional armed forces will continue to suffer from inadequate funding.⁶⁰

For many years, the defense industrial sector was heavily dependent on arms sales abroad, since these sales exceeded defense procurements by the Russian armed forces. However, while arms exports have been steady, ranging from about \$2 billion to \$6 billion over the period from 1993-2009, they have not greatly increased and have declined in some areas of weaponry (see below, “Arms Exports”). In recent years, defense procurements have been increasing (except for a dip in 2008-2009 as a result of the global economic downturn’s effects on Russia’s budget), and are set to rise sharply as a result of Putin’s new arms acquisition plan for 2011-2020 (see below, “State Armaments Procurement Program for 2011-2020”).

The Russia-Georgia conflict contributed to greater recognition by the Russian leadership that some military equipment and technology needed to be purchased abroad to supplant problematic

⁵⁷ Keith Crane and Artur Usanov, “Role of High-Technology Industries,” in Anders Aslund, Sergei Guriev, and Andrew Kuchins, eds., *Russia After the Global Economic Crisis*, Peterson Institute for International Economics, 2010, p. 122; Susan Jackson, “Arms Production,” *SIPRI Yearbook 2010* (Oxford, UK: Oxford University Press, 2010), p. 261; CEDR, March 2, 2011, Doc. No. CEP-767004. Defense firms fall under laws protecting them from liquidation under bankruptcy through the provision of state guarantees.

⁵⁸ Keith Crane and Artur Usanov, “Role of High-Technology Industries,” in Anders Aslund, Sergei Guriev, and Andrew Kuchins, eds., *Russia After the Global Economic Crisis*, Peterson Institute for International Economics, 2010, pp. 114-116.

⁵⁹ CEDR, December 17, 2010, Doc. No. CEP-358007.

⁶⁰ Margarete Klein, *Russia’s Military Capabilities: “Great Power” Ambitions and Reality*, German Institute for International and Security Affairs, Berlin, October 2009, p. 33.

domestic military production. Nonetheless, there has remained much reluctance among some sectors of the leadership and the defense industrial sector to greatly enlarge such purchases and to close obsolete defense industries.

To increase the defense ministry's control over defense contracting, a Federal Agency on Procurement of Weapons Systems, Military, and Specialized Equipment and Logistics was set up in 2008. This agency aims to restrict the ability of each branch of service to sign and manage defense contracts, a practice which had increased expenditures for large numbers of questionable weapons and expanded the scope of corruption and mismanagement. Reportedly, the new agency has been given responsibility over a small fraction of contracts placed under the 2011 state defense order, but will handle over one-half of contracts in 2012 and 100% in 2013. Similarly, a Scientific-Technical Council (NTS)—the defense minister is the head, the chief of the general staff is the deputy head, and the head of the Armed Forces Military-Scientific Committee is the executive secretary—was formed to decide on proposals for R&D for arms and special equipment received from the institutes and services. The Military-Scientific Committee (shifted from subordination to the General Staff to the Defense Ministry) oversees the activities of 5 newly created military scientific research institutes, which had been formed following the consolidation of 19 military science committees and 38 scientific research organizations. For the 2011 defense order, the NTS decided to fund only about one-fifth of the proposals for R&D.⁶¹

Failure of the 2010 State Defense Order

The 2010 state defense order—a plan and budget for yearly weapons acquisition worked out by the presidential administration's Military-Industrial Commission—was not fulfilled, leading to accusations and explanations from the government and defense industries.⁶² A *Nezavisimaya gazeta* newspaper editorial in March 2011 strongly criticized the apparent failure by defense industries to deliver more than 30% of the weaponry they agreed to supply in 2010 despite full budget allocations. Among the failures, only 5 of 11 space satellites were manufactured, and 2 nuclear submarine cruisers, a corvette, 4 Yak-130 aircraft, and 73 BMP-3 infantry fighting vehicles were not delivered as scheduled. The editorial called for disciplinary actions against managers of defense industries (another newspaper argued that although the delays should lead to repercussions, such delays in the delivery of weapons systems also occur in the United States and Europe). In addition to these nondeliveries, the future of work on the Type-667 diesel submarine was uncertain, the fielding of a new Yak-30 trainer was delayed, and the testing of the Su-35 fighter was behind schedule, the editorial complained.⁶³

Seeking to explain why the 2010 state defense order was not fulfilled, the Nizhny Novgorod Association of Manufacturers and Enterprises (NAPP) in late January 2011 sent a letter to President Medvedev claiming that the shortfalls were due to inadequate government funding for defense industry modernization and to an unrealistic procurement process.⁶⁴ Ministry of Industry official Vladimir Nefedov appeared to support this latter defense industry argument when he

⁶¹ "North America: Relations with the Russian Federation," *Jane's Sentinel Security Assessment*, June 22, 2011; Roger McDermott, "Moscow Intensifies Military-Scientific Research in Modernization Drive," *Eurasia Daily Monitor*, March 15, 2011; *CEDR*, March 18, 2011, Doc. No. CEP-358015.

⁶² On the state defense order, see Julian Cooper, "The 'Security Economy,'" in Mark Galeotti, ed., *The Politics of Security in Modern Russia* (Burlington, VT: Ashgate Publishing Company, 2010), pp. 149-151.

⁶³ *CEDR*, March 21, 2011, Doc. No. CEP-9014; March 1, 2011, Doc. No. CEP-358006.

⁶⁴ *CEDR*, March 3, 2011, Doc. No. CEP-349010.

argued in March 2011 that the failure of the 2010 defense order was in part due to the Defense Ministry's tardiness in finalizing competitions for defense contracts, which in effect gave defense industries only a few months to produce weaponry without incurring penalties. Analyst Ivan Safronov argued that compared to state defense orders of past years, the 2010 order was substantially completed, except for some understandable delays. According to this argument, only 50% of weapons had been delivered as funded by the 2009 defense order, whereas 70% had been delivered in 2010.⁶⁵

Reportedly, by early March 2011, Serdyukov had sent a report to President Medvedev detailing the failures of the 2010 state defense order and suggesting disciplinary measures against some directors of defense industries.⁶⁶ On May 10, 2011, in a speech to the heads of defense industries, President Medvedev condemned the lack of fulfillment of the defense order, stating that "it is an unacceptable situation when decisions are made at the highest level, the money is allocated, and yet the output is not delivered." He reminded the listeners that in his 2009 address to the Federal Assembly, he had spelled out the numbers of various weapons that would be procured in 2010, and that these numbers had been pledged by the members of the audience. He asked why the pledge had not been fulfilled, and raised a threat that "in different times half of you present here would already be engaged in hard physical labor."⁶⁷

Eight days later, Deputy Prime Minister Sergey Ivanov (in charge of the defense industrial sector) reported to Medvedev that several personnel had been dismissed, including Anatoliy Perminov, chief of the Russian Federal Space Agency (Roskosmos), and that others had been reprimanded (in actuality, some of these personnel had been dismissed or reprimanded before Medvedev's complaint).

State Armaments Procurement Program for 2011-2020

In mid-December 2010, Prime Minister Putin announced a 19.4 trillion ruble (\$698.4 billion) weapons procurement plan for 2011-2020 aimed at modernizing the armed forces. The procurement plan greatly boosts planned spending from a superseded 2007-2015 arms procurement plan.

The new procurement plan calls for upgrading 11% of military equipment each year, with a final goal of increasing the share of modern weaponry to 70% of the total inventory by 2020.⁶⁸ The program calls for gradually boosting funds in the first few years and greatly increasing them in later years. To reduce the past problem of delays in providing payments to defense firms, which sometimes even led to furloughs at defense firms, Serdyukov stated in early July 2011 that up to 100% of funding each year would be provided in advance to firms with a good track record, and that firms would be permitted to make a 25% profit, as long as a large part of the profit was plowed back into modernization.

⁶⁵ CEDR, May 19, 2011, Doc. No. CEP-358005.

⁶⁶ CEDR, March 2, 2011, Doc. No. CEP-767004.

⁶⁷ The Kremlin, President of Russia, *Meeting on Russia's Defense Industry Development, 10 May 2011, Gorki, Moscow Region*, May 11, 2011.

⁶⁸ "North America, Relations with the Russian Federation," *Jane's Sentinel Security Assessment*, June 22, 2011.

In early 2011, General Makarov asserted that the need to modernize weapons was a major motivation of the defense reforms. He stated that “our army needs to be equipped with not the latest but at least modern models of weaponry and military equipment. But ... there are virtually no such models in Russia.... The Armed Forces should receive ... all the necessary resources that will actually make it possible to [create a new army]. And the [19.4] trillion rubles ... give us the opportunity to carry out what we have planned.”⁶⁹

The 2011-2020 military procurement program is to specifically focus on nuclear weapons and delivery systems for the Strategic Rocket Forces; fifth-generation fighter aircraft for the Air Force; ships and submarines for the Navy; and air-defense systems, digital communications means, and intelligence capabilities. As mentioned above, the 10-year procurement plan calls for cuts to R&D to about 10% of the planned spending, compared to 20%-30% in the superseded 2007-2015 plan.⁷⁰ In July 2011, Serdyukov complained that a substantial part of R&D expenditures had “vanished” without results.⁷¹ Perhaps to partly compensate for cutting R&D costs, Russia has shifted to some foreign weapons purchases that emphasize technology transfers. Also, some procurement funding for basic research has been accentuated.

In early July 2011, the prominent general-designer of the Moscow Institute of Thermal Engineering (MITE), Yuriy Solomonov (who has headed the design of the Bulava and other missiles), asserted that there was danger that the 2011 defense order could fail, in part because of continuing tardiness by the Defense Ministry in issuing contracts. Responding to this warning, President Medvedev ordered Serdyukov to report on the status of the defense order and to fire any officials hindering its fulfillment. He also warned that if allegations about the failure of the defense order proved unfounded, such “panic-mongers” would be punished. Serdyukov dismissed Solomonov’s charge as a “lobbying” effort by MITE to pressure the Defense Ministry to approve a contract with MITE that contained large price increases. Serdyukov too threatened unspecified sanctions against such “lobbyists.” However, Serdyukov admitted that about one-fifth of defense order funding had not yet been contracted out, allegedly because of questions about sharply raised prices requested by some holding companies. He stated that all contracts would be signed in August 2011. He also pledged that defense contracts for 2012 would be completed and signed by the end of 2011, and that 100% funding would be provided to the firms, so that the situation in 2010-2011 would not be repeated.⁷²

Foreign Arms Technology Purchases

Military doctrine and procurement plans emphasize bolstering domestic weapons production as a national security priority, but Russian officials also have pursued purchases of some advanced military weapons and technology from “advanced industrialized countries,” in order to facilitate the revitalization of the domestic defense industrial sector. As stated by former First Deputy Defense Minister Vladimir Popovkin, “our task is not to buy foreign equipment [per se], but technologies on the basis of which we would be capable of organizing production in Russia. We, unlike some other countries [perhaps referring to China], are not secretly copying examples, but openly we say we are prepared to pay for technologies, to buy licenses for production.... The

⁶⁹ *CEDR*, February 23, 2011, Doc. No. CEP-358004.

⁷⁰ “North America, Relations with the Russian Federation,” *Jane's Sentinel Security Assessment*, June 22, 2011.

⁷¹ *CEDR*, July 6, 2011, Doc. No. CEP-358004.

⁷² *CEDR*, July 7, 2011, Doc. No. CEP-950095; July 31, 2011, Doc. No. CEP-950025; *Interfax*, July 28, 2011.

main condition is the transfer of production to Russian territory and the transfer of technologies.”⁷³ However, potential suppliers have often been reluctant to provide sensitive technologies to Russia.

According to some observers, Russia’s arms import policy is two-staged, at first involving the purchase of equipment with some technology transfer, and at the second stage involving the setting up of joint ventures for serial production of weapons in Russia. In June 2011, the deputy chair of the State Duma’s Defense Committee, Igor Barinov, endorsed plans by the Defense Ministry to purchase foreign weapons, arguing that such purchases stimulate Russian defense industries to lower production costs and to improve their products.⁷⁴

The policy of arms technology purchases has included reforging ties with defense industries in the “near abroad” countries of the former Soviet Union, including co-production of components and complete weapons, mostly based on Soviet-era designs and factories. Russia has aggressively pursued control over Soviet-era defense firms in the “near abroad,” such as its signing of joint venture accords with Armenia in late 2009.

In the latter part of the 2000s, Russia began pursuing defense-related high-technology transfers from the “advanced industrialized countries” in Europe and Asia. In July 2007, Russian arms trader Rosoboroneksport and France’s Thales had signed a deal to purchase Catherine FC thermal imagers for 100 Russian T-90 tanks. Nonetheless, discussing the design of a new generation of military vehicles, then-First Deputy Prime Minister Sergey Ivanov asserted in April 2008 that Russian military vehicles must consist of only domestically made parts. Similarly, Prime Minister Putin lamented during a tour of an air defense missile plant that “we are now dependent on foreign suppliers in such a sensitive area [as air defense]. . . . We need to secure our independence from foreign supplies when working on defense contracts.”⁷⁵

According to some observers, the argument over whether to only import materials or otherwise limit weapons technology transfers or to import weapons components and whole weapons in order to quickly reequip the armed forces came to a head after the August 2008 Russia-Georgia conflict.⁷⁶ In December 2008, Lieutenant-General Vladimir Shamanov, who helped lead Russia’s invading forces during the conflict and subsequently was the chief of the Defense Ministry’s Main Combat Training Directorate, asserted that “the defense minister’s position is extremely specific . . . regarding the outfitting of troops with all necessary assets. . . . If domestic industry cannot create a competitive product for the troops, we will purchase it from foreign manufacturers.”⁷⁷ Another argument in favor of collaboration with foreign defense industries was made by Rosoboroneksport General Director Anatoliy Isaykin, who argued in August 2011 that such collaboration is necessary so that Russia will be able to offer modern weapons for export.⁷⁸

The 2009 purchase of 12 unmanned aerial vehicles (UAVs) from Israel Aerospace Industries (IAI) highlighted Russia’s efforts to acquire technology to modernize its defense production. The

⁷³ “Popovkin on OPK, IVECO, Mistral, and Bulava,” *Russian Defense Policy*, October 26, 2010, at <http://russiandefpolicy.wordpress.com/tag/vladimir-popovkin>.

⁷⁴ *CEDR*, June 15, 2011, Doc. No. CEP-950178.

⁷⁵ Open Source Center, *Open Source Center Analysis*, December 16, 2008, Doc. No. CEF-305001.

⁷⁶ *Ibid.*

⁷⁷ *CEDR*, December 2, 2008, Doc. No. CEP-548024.

⁷⁸ *CEDR*, August 12, 2011, Doc. No. CEP-358012.

\$53 million purchase of three types of UAVs was spurred by Russia's observation of the use of Israeli UAVs by Georgia during the 2008 Russia-Georgia conflict, which were assessed to be far more effective on the battlefield than Russian UAVs. Under the deal, IAI trained about 50 Russian pilots to operate the UAVs. The transfer was completed in late 2010, and the two sides signed a follow-on three-year, \$400 million contract to set up a joint venture, reportedly to assemble Heron medium-altitude long-endurance UAVs in Russia.⁷⁹ In August 2011, the deputy director of the Federal Service for Military-Technical Cooperation (FSVTS), Konstantin Biryulin, complained that existing domestic UAV production had suffered from the poor quality (industrial rather than military-certified) micro-electronics that Russia was able to import, but claimed that indigenous micro-electronics and UAV design were improving.⁸⁰

Among other purchases, since the 1990s, the French Sagem firm has supplied inertial navigation systems for Russian MiG and Sukhoi aircraft for the export market. In December 2010, Sagem and Rosboronexport signed an agreement on forming a joint venture (Russia will have 51% of the shares) in Russia to produce inertial navigation systems for Russian military aircraft. In February 2011, former First Deputy Defense Minister Popovkin stated that Russia is negotiating to procure the FELIN "soldier of the future" infantry combat uniform and equipment from Sagem, with the intention of producing a Russian version by 2020.⁸¹

Defense cooperation with India dates from the Soviet period. During President Medvedev's visit to India in December 2010, India's Hindustan Aeronautics Limited and Russia's Sukhoi Design Bureau and Rosoboronexport signed a \$295 million design contract for joint development of a fifth-generation fighter aircraft (FGFA). Design work on the aircraft is envisaged to be completed within 18 months, followed by a development phase of 10 years and the construction of up to 300 FGFA.⁸²

The Mistral Purchase

Beginning in 2009, Russia negotiated with France over the purchase of a newly designed French Mistral-Class Amphibious Assault, Command, and Force Projection Warship. French President Nicolas Sarkozy declared at first that the warship would be sold without armaments, while Makarov asserted that a sale was contingent on the inclusion of command and navigation systems and weapons.⁸³ Some Members of Congress raised concerns with France over the Mistral negotiations, as did the government of Georgia, which feared that Russia might in the future use the ship against it.

On January 25, 2011, the French Defense Minister, Alain Juppe, and a Russian Deputy Prime Minister, Igor Sechin, signed an intergovernmental cooperation agreement for two Mistrals to be built in France and two in Russia, the first sale by a NATO member of a major weapons system to Russia. The agreement calls for technology transfers necessary for the construction of the hulls and for information management and communications, but for no weapons systems to be

⁷⁹ "North America: Relations with the Russian Federation," *Jane's Sentinel Security Assessment*, June 22, 2011.

⁸⁰ *Interfax*, August 15, 2011.

⁸¹ "Sagem and Rosoboronexport to Create Joint Venture for Inertial Navigation Systems," *Safran/Sagem*, December 9, 2010, at <http://www.sagem-ds.com/spip.php?article767>; *RIA Novosti*, February 24, 2011.

⁸² "North America: Relations with the Russian Federation," *Jane's Sentinel Security Assessment*, June 22, 2011.

⁸³ "Arms Trade," *Moscow Defense Brief*, No. 1, 2010; *Agence France Presse*, March 25, 2010.

transferred.⁸⁴ Reportedly, new shipyard facilities will be built in Kronstadt, Russia, to construct the two Mistral, after which the facilities will be used to build other warships.⁸⁵

In late April 2011, then-First Deputy Minister of Defense Popovkin, who was responsible for negotiating the Mistral purchase, was transferred to head the Roskosmos, and his duties regarding the purchase were taken on by Deputy Minister Bulgakov. His transfer may have been linked to a reported controversy over Vice Admiral Nikolay Borisov, the deputy commander-in-chief of the Navy, who allegedly was removed from the negotiating team for the Mistral purchase on the grounds that he had unilaterally made decisions on the terms of the purchase. New negotiators from Rosoboroneksport were brought in.

In mid-June 2011, Russia's Rosoboronexport General Director Anatoly Isaikin signed a contract with France's DCNS (Direction des Constructions Navales) Director Patrick Boissier on the purchase of two Mistral-class warships. President Medvedev and French Foreign Trade Minister Pierre Lellouche attended the signing ceremony, held on the sidelines of the St. Petersburg International Economic Forum. Trotsenko stated that "the French side has accepted an unprecedented level of cooperation in the handover of know-how, and will transfer know-how to Russia, including the basic computer codes of the combat information control systems and communications systems." Reportedly, about 20% of the construction of the first warship and 40% of the second will be carried out by Russian firms. Details on pricing and timeframes, and the building of two more warships in Russia, will be worked out in a separate agreement.⁸⁶ In early July 2011, Serdyukov stated that "with the purchase of the Mistral we demonstrated rather serious intentions of continued cooperation with foreign firms and of further procurements and foreign contracts."⁸⁷

Arms Exports

In recent years, Russia and the United States have vied for top place in world arms sales. Over the period 2005-2009, Russia accounted for about one-quarter of global weapons exports, and the United States accounted for slightly less than one-third, according to the Stockholm International Peace Research Institute (SIPRI).⁸⁸ Using U.S. government-derived data, the Congressional Research Service (CRS) has estimated that Russia's arms deliveries to the world have fluctuated from 2000 to 2009, ranging from a low of \$3.3 billion in 2005 to a high of \$6 billion in 2006 (see **Table 2**). According to the director of the Russian Defense Ministry's Federal Service for Military-Technical Cooperation (FSVTS), Russia's arms export deliveries jumped in 2010 to \$10 billion; in addition, Russia received \$48 billion in future orders, he claimed. Over the past decade, he asserted, Russia expanded "the geography of our cooperation and increas[ed] the volumes of arms deliveries including spare parts, tools and accessories, and servicing."⁸⁹ For 2011, Rosoboronexport General Director Anatoly Isaikin claimed that arms deliveries would be over \$9

⁸⁴ Open Source Center, *Europe: Daily Report*, January 25, 2011, Doc. No. EUP-950035.

⁸⁵ *CEDR*, January 26, 2010, Doc. No. CEP-349004.

⁸⁶ *Interfax*, June 17, 2011.

⁸⁷ *CEDR*, July 6, 2011, Doc. No. CEP-358004.

⁸⁸ Paul Holtom, Mark Bromley, Pieter Wezeman, and Siemon Wezeman, "International Arms Transfers," *SIPRI Yearbook 2010* (Solna, Sweden: SIPRI, 2010), p. 287.

⁸⁹ *CEDR*, February 25, 2011, Doc. No. CEP-358003.

billion, despite unrest in the Middle East that had jeopardized some contracts. Military aircraft and helicopters account for most of the value of agreements and deliveries in 2011, he stated.⁹⁰

Table 2. Russian and U.S. Arms Transfer Agreements with and Deliveries to the World, 2000-2009

(U.S. current dollars in billions)

Year	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	Total
Russian Agreements	6.7	5.5	5.6	4.3	8.2	8.2	14.7	10.6	5.4	10.4	79.6
Russian Deliveries	4.2	4.7	3.6	4.2	5.5	3.3	6.0	5.1	5.9	3.7	46.2
U.S. Agreements	17.5	11.4	12.9	14.4	12.7	12.8	16.0	24.4	37.2	22.6	181.9
U.S. Deliveries	12.9	9.2	9.7	10.8	11.6	11.8	12.4	12.3	12.0	14.4	117.1

Source: U.S. government-derived data, as presented in CRS Report RL34723, *Conventional Arms Transfers to Developing Nations, 2000-2007*, by Richard F. Grimmett; and CRS Report R41403, *Conventional Arms Transfers to Developing Nations, 2002-2009*, by Richard F. Grimmett.

Major recipients of Russian arms over the period 2000-2010 include China, India, Algeria, Venezuela, Iran, Vietnam, Malaysia, and Yemen. In all, some 70 countries field Soviet-era weaponry and are customers for servicing and upgrades. Weaponry is provided to fellow members of the Russia-led Collective Security Treaty Organization at a discount. Russia's substantial arms agreements with Algeria, Yemen, and Libya may have been jeopardized by recent unrest in those countries.⁹¹

Russia's defense industries relied on arms exports during most of the 1990s and into the 2000s in order to gain revenues in the face of the fall-off of weapons purchases by the Russian armed forces. Commenting on this situation, Russian military academician Vladimir Lutovinov lamented in 2008 that the defense industrial sector "survive[s] mainly on the basis of the production of armaments for other countries' armies.... The arms and military equipment that are being developed and produced are not designed to be delivered to Russia's military organization, but are being sold abroad.... And the prices at which the weapons are sold abroad are sometimes lower ... than those at which arms and military equipment are purchased by our own Armed Forces."⁹²

The FSVTS oversees the issuance of import and export licenses for military products, participates in negotiations for arms sales, and assists in setting up arms shows abroad. Formally attached to the Defense Ministry, it reportedly is controlled by the president.⁹³ According to FSVTS Director Mikhail Dmitriyev, the number of international complaints about the quality of Russian weapons, spare parts, and services has decreased in recent years. He stated that "overall, the situation is

⁹⁰ *Interfax*, August 17, 2011.

⁹¹ Ariel Cohen, "Russia Fighting to Save Arms Sales to the Middle East," *The Foundry*, The Heritage Foundation, May 2, 2011.

⁹² *CEDR*, March 12, 2008, Doc. No. CEP-548006.

⁹³ Andrei Shoumikhin, "Guns and Butter," *The Journal of International Security Affairs*, Spring/Summer 2011, p. 78.

changing for the better, albeit slowly, and we have managed to maintain our key advantages in the arms market,” which are competitive pricing and “sufficient quality.” However, the reorganization of defense industries, in particular the incorporation of Rosoboroneksport into Rostekhnologii, and increasing Russian involvement in joint design and production, have posed challenges to the mission of FSVTS to facilitate high efficiency and good quality military-technical cooperation.⁹⁴ The Rosoboroneksport holding company established control over arms exports by over 100 firms in 2007. According to FSVTS, besides Rosoboroneksport, there are 21 other firms authorized to export weapons.

Even though Russian arms transfers to major customers India and China have declined recently, these sales are likely to remain substantial for several years. Russia has sold combat fighter aircraft, battle tanks, and other major weaponry to India, along with licenses for co-production, and continues to provide support services. To look at one major weapon transfer, in January 2004, Russia agreed to sell the *Admiral Gorshkov* aircraft carrier to India, to be renamed the *Vikramaditya*, for \$1.5 billion, to include upgrading at a Russian shipyard and aircraft and helicopters. The carrier was to be delivered in late 2008. However, delays in refurbishing the carrier and cost overruns—causing contention in Russia-India relations—have set back delivery until early 2013, at a final price of \$2.3 billion. Russian Sukhoi Su-30 fighter aircraft and the T-90 tank are being co-produced in India. A joint venture is producing the BrahMos short-range supersonic cruise missile, and Russia may possibly use the missile in its Navy. Russia has sold Su-30 multi-role fighter aircraft, Sovremenny-class destroyers, Kilo-class diesel submarines, and other weaponry to China, and transferred licenses for the production of Su-27 fighter aircraft. In recent years, however, there have been no substantial Russian arms agreements with China, including because of tensions over Chinese reverse engineering of weapons purchased from Russia.⁹⁵

In May 2011, Rosoboroneksport signed its first contract with the U.S. Department of Defense, to export 21 Mi-17 helicopters in 2011-2012 to Afghanistan for use by the Afghan Army.⁹⁶

Power Projection Capabilities

According to some observers, one of the main goals of Serdyukov’s reforms, as an extension of homeland security, is to maintain and enhance Russia’s power projection capabilities in the territories of Soviet successor states. Leases for bases and other military facilities have been extended in several cases, and new troops have been sent to Georgia’s breakaway regions, indicating no plans to reduce such military expenditures for force deployments as part of the reforms. On the other hand, the reforms have placed less priority on global power projection, although there is interest in asserting influence in the Arctic and in holding demonstrative exercises elsewhere.

Russia has bases or facilities in most of the Soviet successor states, and recently has strengthened its presence through lengthy extensions of basing agreements with Armenia and Ukraine (see text box below). In Georgia, where Russia had reported that it had closed its bases by late 2007, it reintroduced or buttressed substantial forces in South Ossetia and Abkhazia after the August 2008

⁹⁴ CEDR, February 25, 2011, Doc. No. CEP-358003.

⁹⁵ CRS Report R41403, *Conventional Arms Transfers to Developing Nations, 2002-2009*, by Richard F. Grimmett.

⁹⁶ Open Source Center, *South Asia: Daily Report*, August 6, 2011, Doc. No. SAP-950021.

Russia-Georgia conflict, numbering some 7,000 military forces. Russia also has 1,500 troops in the Moldovan separatist region of Transnistria.⁹⁷ The Russian military is also cooperating with international forces (see) and participating in exercises such as twice-yearly search and rescue and anti-terrorism operations carried out by the Black Sea Naval Force (BLACKSEAFOR; members include other littoral states Turkey, Bulgaria, Romania, Ukraine, and Georgia). A major element of Russia's power projection has involved recent efforts to bolster the military power of the Collective Security Treaty Organization. Russia also participates in the Shanghai Cooperation Organization (SCO; other members include China and Kazakhstan, Kyrgyzstan, Tajikistan, and Uzbekistan), a military and economic cooperation organization where it shares leadership responsibilities with China. According to some observers, Russian participation in the SCO aims to enhance regional security as well as check Chinese influence in the region.⁹⁸

Russian Military Deployments Abroad

Deployments in Soviet Successor States

Armenia—Army: 3,214 personnel; 2 motor rifle brigade; 74 main battle tanks; 330 armored infantry fighting vehicles; 14 armored personnel carriers; 68 self-propelled/towed artillery; 8 mortars; 8 multiple rocket launchers; 1 base. Air Force: 1 squadron with 18 MiG-29 Fulcrum fighter aircraft; 2 air defense batteries with S-300V (SA-12A Gladiator) surface-to-air missiles; 1 air defense battery with SA-6 Gainful surface-to-air missiles; 1 air base at Yerevan.

Azerbaijan—900 Russian Space forces personnel (the agreement permits up to 1,500) at the Gabala phased-array early warning radar site.

Belarus—Strategic Deterrent Forces/Warning Forces: 1 radar station at Baranovichi (Volga system; leased). Navy: 1 naval communications site.

Georgia—Army: 7,000 personnel; Abkhazia: 1 motor rifle brigade; South Ossetia: 1 motor rifle brigade. Air Force: some attack helicopters.

Kazakhstan—Strategic Deterrent Forces/Warning Forces: 1 radar station at Balkash.

Kyrgyzstan—Air Force: 500 personnel; 5 Su-25 Frogfoot; 2 Mi-8 Hip support helicopters.

Moldova/Transnistria—Army: 1,500 personnel (including 335 peacekeepers); 2 motor rifle battalions; 100 main battle tanks/armored infantry fighting vehicles/armored personnel carriers. Air Force: some Mi-8 Hip transport helicopters.

Tajikistan—Army: 5,000 (including Tajik soldiers); 1 military base with 1 motor rifle division, under-strength; 54 T-72 tanks; 300 armored infantry fighting vehicles/armored personnel carriers; 100 artillery/multiple rocket launchers. Air Force: 5 Su-25 Frogfoot attack aircraft; 4 Mi-8 Hip transport helicopters.

Ukraine—Navy: Coastal Defense; 13,000 including Naval Infantry (Marines) 1,100; 102 armored infantry fighting vehicles/armored personnel carriers; 24 artillery. Navy: Black Sea Fleet; 1 fleet headquarters located at Sevastopol. Strategic Deterrent Forces/Warning Forces: 2 radar stations located at Sevastopol (Dnepr System, leased) and Mukachevo (Dnepr system, leased).

International Deployments

Bosnia-Herzegovina—OSCE: 3 observers.

Côte D'Ivoire—U.N. Operation in Côte d'Ivoire (UNOCI): 11 observers.

Central African Republic/Chad—U.N. Mission in the Central African Republic and Chad (MINURCAT): 119

⁹⁷ Many observers argue that the presence of these forces in Georgia and Moldova violates the commitments undertaken by Russia as part of the adaptation of the CFE Treaty in 1999. Russia suspended its observance of its CFE Treaty obligations at the end of 2007.

⁹⁸ CRS Report RL30294, *Central Asia's Security: Issues and Implications for U.S. Interests*, by Jim Nichol; Sebasien Peyrouse, "Russia-Central Asia: Advances and Shortcomings of the Military Partnership," in Stephen Blank, ed., *Central Asian Security Trends*, Strategic Studies Institute, U.S. Army War College, April 2011, p. 12.

observers; 1 helicopter platoon with 4 Mi-17 (Mi-8MT) Hip-H medium transport helicopters.

Democratic Republic of the Congo—U.N. Organization Stabilization Mission in the Democratic Republic of the Congo (MONUSCO): 28 observers.

Gulf of Aden—Navy: 1 destroyer; 1 replenishment oiler (light); 1 tug, ocean going.

Liberia—U.N. Mission in Liberia (UNMIL): 4 observers.

Middle East—U.N. Truce Supervision Organization (UNTSO): 5 observers.

Kosovo—OSCE: 2 observers.

Sudan—U.N. Mission in Sudan (UNMIS): 123; 13 observers; 1 helicopter convoy.

Syria—Army/Navy: 150; 1 naval facility under renovation at Tartus.*

Western Sahara—U.N. Mission for the Referendum in Western Sahara (MINURSO): 17 observers.

Source: Adapted from International Institute of Strategic Studies, *The Military Balance*, March 7, 2011; and CRS.

*At the end of July 2011, Russian naval officials reportedly insisted that the Tartus facility, despite some civil unrest in the city, “will be maintained in a condition that will guarantee the fulfillment of all the tasks assigned to it.” The facility was described as “Russia’s only naval base outside of the former Soviet Union,” as seldom used, and as consisting mainly of a repair vessel, barracks, and support buildings. *Interfax*, August 1, 2011.

In 2007, then-President Putin relaunched a policy of power projection beyond the borders, at the same time that he increased rhetoric against U.S. foreign policy and NATO activities. In August 2007, for the first time since 1992, Russia resumed strategic long-range bomber patrols that approached U.S. and NATO airspace. In late 2007-early 2008, up to 30 naval vessels including the aircraft carrier *Admiral Kuznetsov* conducted exercises in the North Atlantic and Mediterranean Sea. In November-December 2008, the missile cruiser *Peter the Great*, the anti-submarine destroyer *Admiral Chabanenko*, and other ships visited Venezuela to participate in naval exercises, and later visited Cuba, the first major Russian naval presence in the Caribbean Sea since the breakup of the Soviet Union. These ship visits required substantial advance preparation. In November 2008, Presidents Medvedev and Obama agreed to combat piracy in the Gulf of Aden and off the Somali coastline, and Russian ships subsequently began parallel operations with the Combined Task Force 151 international coalition.

Although Russia has relaunched air and naval patrols, “show the flag” visits, and participation in exercises, it has not ramped up a global network of military bases, seemingly reflecting the lesser priority the military reform agenda places on stepping up military expenditures and deployments necessary for global power projection.⁹⁹ Russia’s *Admiral Kuznetsov* aircraft carrier is due at the end of 2012 for a lengthy refitting, and Russian defense officials have stressed despite some opposition that there will be no funding to build new aircraft carriers. The Mistral warship purchase will provide some power projection capabilities. The first two Mistrals are planned for delivery in 2014-2015.

⁹⁹ Klein, *Russia’s Military Capabilities: “Great Power” Ambitions and Reality*, p. 19.

Economic Resources: Defense Budget Trends

Earlier reforms attempted by former President Putin, as well as the most recent reform effort, have contributed to rising defense budgets. The improvement of Russia's economy since 1999, fueled in large part by the cash inflow from sharply rising world oil and gas prices, has enabled Russia to reverse the budgetary starvation of the military during the 1990s. Defense spending increased substantially in most of the 2000s, and even continued to increase slightly after the global financial crisis of 2008 impacted Russia's economy. The increased defense spending in 2011 has been explained by the Russian leadership as a means of boosting the Russian economy as well as modernizing defense procurement. Virtually all observers agree that Russian defense spending still lags far behind current U.S. or former Soviet levels. Moreover, the efficacy of the recent large boosts in defense spending has been reduced by systemic corruption and mismanagement.

It is difficult to estimate Russia's military spending. During the 1990s and early 2000s, the defense budget presented by the government to the legislature contained up to 19 line items, and some items of expenditure were declassified at the request of the legislature, but during the 2000s the number of line items shrank, so that they "are so general that they provide no sense to Duma members, or society, of how the armed forces is actually allocating its budget."¹⁰⁰ In addition, much military spending is not reflected in the official defense budget.

The Stockholm International Peace Research Institute (SIPRI) and the International Institute of Strategic Studies (IISS) have estimated that Russia's military expenditures are now the fifth largest in the world, after the United States, China, France, and the United Kingdom. Because of budget austerity plans by France and the United Kingdom and Russia's plans to boost defense spending, Russia could soon surpass them to have the third-largest military expenditures in the world.

Table 3. Russia's Military Expenditures, 2008-2011

(U.S. dollars in billions)

Year	2008	2009	2010	2011
Military Expenditures (SIPRI)	50.9	53.3	58.7	--
Military Expenditures (IISS)	43.2	45.4	50.1	63.3
Expenditures as a % of GDP (SIPRI data)	3.5%	4.3%	4.0%	--
Expenditures as a % of GDP (IISS)	2.5%	3.7%	3.4%	3.5%

Source: Stockholm International Peace Research Institute (SIPRI), *SIPRI Military Expenditures Database*, at http://www.sipri.org/research/armaments/milex/research/armaments/milex/milex_database; International Institute of Strategic Studies (IISS), *The Military Balance*, 2008-2011 editions.

¹⁰⁰ Brian Taylor, "The Duma and Military Reform," *PONARS Policy Memo 154*, University of Oklahoma, October 2000; Mark Smith, "The Politics of Security," in Mark Galeotti, ed., *The Politics of Security in Modern Russia* (Surrey, United Kingdom: Ashgate, 2010), p. 39.

Notes: SIPRI data are constant 2009 prices. IISS data are government-reported at current prices, converted from rubles to dollars at the average U.S. exchange rate. IISS data shown here include national defense and military pensions data.

The cutbacks in military personnel have not resulted in near-term budgetary savings because of expenditures on pensions and mandated housing for retiring officers. These costs have reduced the amounts available for boosting salaries and increasing the numbers of contract soldiers.

Russia's data submission to the U.N. Office of Disarmament Affairs for 2010 reported military expenditures of \$33.9 billion, excluding a reported \$4.5 billion for paramilitary forces. Of this amount, 36% was for the Ground Forces, 17% was for the Navy, 15% was for the Air Force, and 17% was for other combat forces (no data were provided for Strategic Rocket Forces, a major gap in the report). Of the reported military expenditures, 56% was expended on personnel, 21% on operations and maintenance, 17% on arms procurement, 2% on construction of facilities and bases, and 5% on R&D. In the area of procurement, the submission indicates that a large share was for acquisition of electronics, communications equipment, and warships (about 7% of all procurement spending).¹⁰¹

In December 2010, President Medvedev stated that in 2011-2020 defense spending would be maintained at the level of 2.8% of GDP, which would permit "equipping the troops with new technology and ... resolving all the social issues that servicemen have," including carrying out the pledge to greatly increase pay and allowances beginning in 2012 and to contract out nonmilitary services.¹⁰² However, the 2011-2020 State Program of Armaments calls for spending 1.5 trillion rubles (\$54 billion) in 2011, rising to 2 trillion rubles (\$72 billion) annually in 2013 and thereafter, for a total of 19.4 trillion rubles (\$698.4 billion) over the 10-year period. These amounts would appear to boost defense spending as a percentage of GDP beyond what Medvedev has claimed. The State Program of Armaments 2011-2020 ostensibly includes the net proceeds from arms exports from state-owned defense firms, which are not included in the defense budget.

In July 2011, Prime Minister Putin unveiled draft budget guidelines for 2012-2014, which call for boosting defense spending to 1.85 trillion rubles (\$66.6 billion) in 2012, 2.33 trillion rubles (\$83.9 billion) in 2013, and 2.75 trillion rubles (\$99 billion) in 2014. Weapons expenditures account for the largest portion of the increased funding, he indicated, but salaries for military personnel and military pensions also would be substantially boosted. Spending for a more substantial clothing kit and food rations also are envisaged. At the same time, the guidelines call for reducing nondefense spending, which could squeeze social programs. Russian Finance Minister Alexey Kudrin reportedly stated in June 2011 that defense spending would be \$70 billion in 2012 (perhaps similar to Putin's reported \$66.6 billion). However, he also revealed that costs for military pensions would be \$28.5 billion, for a total of \$98.5 billion.¹⁰³ Putin's announced guidelines seemed to contradict his assertion two months previously that the planned military budget did not denote the "militarization" of the state budget. He argued that the guidelines for defense spending were still "25 times less than the military expenditures of the United States," and urged adding 3 billion rubles (\$98 million) to the 10-year plan for weapons procurement.

¹⁰¹ *Russian Federation Fiscal Year 2010*, U.N. Office of Disarmament Affairs, at <http://disarmament.un.org/Milex.nsf>.

¹⁰² *CEDR*, December 22, 2010, Doc. No. CEP-358010.

¹⁰³ *CEDR*, June 15, 2011, Doc. No. CEP-950170.

Implications for Russia

The military reforms launched in late 2008 have been partly successful in changing from mobilization divisions to what is proclaimed to be fully staffed brigades, and in setting up military districts with more modern joint command and control. However, the reforms have faced myriad challenges, partial reversals, and other setbacks. As discussed below, these include problems in carrying out the ambitious weapons modernization program, in conscripting enough quality troops, and in boosting the number of professional soldiers. The reforms also may contribute to political instability and economic dislocations.

Political Instability

The military reform effort launched in 2008 has created ongoing tensions among active and ex-military personnel and diverted budgetary resources from social programs and nonmilitary development efforts that had long been starved of government funding. Military discontent has included high-profile resignations by generals and several protest actions by active duty servicemen and veterans. Major-General (retired) Vladimir Dvorkin, chief research officer at the Institute of World Economy and International Relations, and former head of the defense ministry's 4th Central Research Institute, has argued that because the reforms have been "decided within a restricted circle of senior officials ... without any feasibility studies or independent research," they have damaged military morale.¹⁰⁴ In November 2010, veterans belonging to the Union of Airborne Troopers of Russia sponsored a rally in Moscow of up to 1,000 or more veterans, ultranationalists, and others to demand Serdyukov's resignation. In February 2011, veterans staged another reportedly small-scale protest in Moscow against the reform and demanded Serdyukov's resignation.

Despite the reported discontent among some military personnel, most observers view it as falling far short of the risk of a military coup against the government. French analyst Thomas Gomart has argued that the Putin-Medvedev era has witnessed the strengthening of political control over the military, and that the military reforms reflect this trend.¹⁰⁵

Besides combating discontent within the military over the reforms, government officials have claimed that they do not siphon resources from nongovernment spending, seemingly an effort to sidestep civilian criticism. Denouncing the increased defense spending, Russian analyst Vladimir Spacibo has stated that the increased weapons expenditure plans "demonstrate that we're again [as in the communist era] being dragged into a senseless and dangerous arms race which in no way increases our military security. On the contrary, it increases the risk of creeping into military conflicts."¹⁰⁶ Russian analyst Ilya Kramnik and others have complained that the defense budget and other basic military affairs are largely hidden from democratic public oversight.¹⁰⁷ Some

¹⁰⁴ Interfax, February 26, 2011; Interfax, March 2, 2011; Roger McDermott, "Russia's Fog of Military Reform," *Eurasia Daily Monitor*, March 8, 2011.

¹⁰⁵ Thomas Gomart, "Russian Civil-Military Relations: Is There Something New with Medvedev?" in Stephen Blank, ed., *Civil-Military Relations in Medvedev's Russia*, Strategic Studies Institute, U.S. Army War College, January 2011, pp. 77-102.

¹⁰⁶ "The Foggy Goal of the GPV," *Russian Defense Policy*, February 15, 2011, at <http://russiandefpolicy.wordpress.com/2011/02/15/the-foggy-goal-of-the-gpv-part-i/>.

¹⁰⁷ CEDR, June 22, 2011, Doc. No. CEP-358005.

observers argue that the civilian population has long been largely apathetic and cynical, and subject to forcible means of suppressing dissent. Other observers suggest that public interest in political affairs appears to be increasing, and could contribute to leadership efforts to mollify or otherwise co-opt discontent. There previously have been economically related demonstrations, and these could recur on a larger scale, some observers warn.

Among possible attempts to assuage military discontent with the reforms, in early February 2011, Putin announced that officers' salaries and pensions would be greatly boosted in 2012. In late February 2011, he pledged to increase military pensions by 70%, perhaps to appease disgruntled former officers who had been forced to retire. It is possible that the recall of some officers slated for dismissal similarly reflected an effort to mollify discontent.¹⁰⁸ These efforts also may well have been aimed at gaining military support in the run-up to December 2011 legislative and March 2012 presidential elections, and were exemplified by the welcome given by the All-Russia People's Front (ONF)—a creation of Prime Minister Putin to increase support for his United Russia Party—to a June 2011 decision by the Armed Forces' All-Russia Veterans Organization to join it.¹⁰⁹ Political motives also may have been involved in a public appeal by the Association of Russian Trade Unions for Defense Sectors of Industry and the Federation of Independent Trade Unions of Russia for the legislature to ban arms imports. According to one analyst, the appeal was aimed against President Medvedev's support for some arms technology imports, and by implication signaled support for Putin as the next president.¹¹⁰

Among other attempts to assuage military discontent with the reforms, some observers suggest that Putin or Medvedev may soon oust Serdyukov and Makarov as the symbols of the turmoil of the reforms. In this case, the reform process may face more difficulties, according to these observers, but this does not mean that the reforms would, or could, be fully reversed.¹¹¹

Economic Challenges

The defense reforms may be a two-edged sword for the overall Russian economy. On the one hand, as mentioned above, the reforms may siphon budgetary resources away from other social and developmental needs and thereby set back the government's campaign to compensate for previous low spending in these areas. If the reform spending contributes to budget deficits, they could exacerbate inflation. On the other hand, combating corruption and the inflation of prices charged by the defense industries are said to be significant elements of the reforms, and could possibly improve the performance of the overall economy if carried out.

So far, it appears to many observers that efforts by the reformers to combat corruption have been mixed at best. Inflation in the prices charged by defense industries continues to erode the value of increased procurement budgets. As one example of the persistence of corruption, in late May

¹⁰⁸ Roger McDermott, "Russian Military Reform And The Unlikely Duet," *Eurasia Daily Monitor*, March 1, 2011.

¹⁰⁹ *Interfax*, June 14, 2011.

¹¹⁰ *CEDR*, July 21, 2011, Doc. No. CEP-6010.

¹¹¹ Kaarel Kaas, "Period of Changes in the Russian Military," in Karmo Tüür, ed., *Russian Federation 2011: Short-Term Prognosis*, Estonian Foreign Policy Institute and the Open Estonia Foundation, 2011, pp. 38-44. Kaas argues that "possible changes in the military top brass neither will have impact on nor reverse the military reform which started in 2008.... In 2011–2012 the Russian armed forces will enter a period of stabilization and evaluation, consolidation, specification and adjustment of the reform results. The main emphasis will shift to ensuring the combat capability and real and effective functioning of the new structure and strategic command model."

2011, Main Military Procurator Sergey Fridinskiy announced that Defense Ministry officials had colluded with a medical supply firm to inflate the price of its products, presumably to permit kickbacks to the officials. The newspaper reporting this and other military corruption concluded that “scandals associated with the wasteful expenditure of resources and direct corruption in the state defense order system have recently become virtually the norm.”¹¹² In late July 2011, Fridinskiy claimed that corruption had actually increased during the reform process on a per capita basis.¹¹³

The strain of increased defense spending on the budget was indicated as early as February 2011, when Minister of Finance Aleksey Kudrin reportedly criticized an optimistic projection by the Ministry of Economic Development that budget deficits could be held to only 2% through 2030 if energy exports and prices increased.¹¹⁴ In late May 2011, Kudrin called for cutting planned military expenditures in order to reduce a projected increase in the 2012 budget deficit perhaps amounting to 2%-3% GDP. Among the cuts urged were those involving plans to boost the number of officers and contract soldiers, to increase weapons procurement, and to improve military housing.¹¹⁵ At a government meeting in early June 2011, the Finance Ministry reportedly prevailed in winning a reduction of military budgets over the next two years, including by cutting planned manpower levels, although details were not revealed.¹¹⁶

German analyst Klein argues that even the boosted defense budgets are inadequate to modernize an armed forces of 1 million personnel. The rate of spending planned per person will remain far lower than in NATO countries, she avers.¹¹⁷

Weapons Production and Procurement Challenges

Threats to the success of the State Armament Program include armaments orders that are mismatched to mission requirements; mismanagement, inefficiency, and technological backwardness in the defense industrial sector that causes failures in developing and delivering weapons; corruption; inflation in procurement prices; and the uncertainty of economic growth and sufficient budgets, as mentioned above. For instance, technological backwardness has stymied efforts to modernize command and control, according to many observers.¹¹⁸

Faced with the failure to fulfill the 2010 defense order and reported problems with the 2011 defense order, President Medvedev has fired or disciplined various Defense Ministry officials and defense industry heads, but these efforts may have a minimal long-term impact on correcting the many problems of procurement, according to most observers. Indicative of other sanctions, in June 2011 the Defense Ministry reportedly cut off Kurganmashzavod (part of the Volgograd Traktomye Zavody holding company) from participating in some defense orders, reportedly

¹¹² CEDR, May 26, 2011, Doc. No. CEP-349006.

¹¹³ Pavel Felgenhauer, “Collapse In Russian Military Morale Undermines Effectiveness,” *Eurasia Daily Monitor*, August 4, 2011.

¹¹⁴ CEDR, February 18, 2011, Doc. No. CEP-37005.

¹¹⁵ CEDR, May 26, 2011, Doc. No. CEP-349007.

¹¹⁶ CEDR, June 23, 2011, Doc. No. CEP-358002.

¹¹⁷ Klein, *Russia's Military Capabilities: "Great Power" Ambitions and Reality*, p. 26.

¹¹⁸ Roger McDermott, “Russian Military Command and Control: A Giant Leap of Faith?” *Eurasia Daily Monitor*, August 16, 2011.

because the firm had failed to fulfill the 2010 defense order for deliveries of infantry fighting vehicles and airborne combat vehicles.¹¹⁹

In June 2011, Serdyukov complained that prices for weapons set by the defense industries were inflated by the inclusion of “factory town” social infrastructure in the pricing, including such costs as “kindergartens, Young Pioneer camps, rest homes, and polyclinics,” which rendered the cost higher than a comparable foreign weapon, he asserted. He condemned the frittering away of funds allocated for weapons production by these costs, and stated that the contracting system now requested that all costs for building a weapon be spelled out, which already had resulted in some of the social costs being excluded.¹²⁰ In early July 2011, Serdyukov similarly criticized the huge price requested by the Sevmash shipyard to deliver a nuclear submarine. Russian analyst Felganhauer termed that the reported price requested by Sevmash, \$12.4 billion, presumably for the new Borei-class platform, “astonishing,” and stated that “the overpricing and misappropriation involved are mindboggling: for the price of one domestically built submarine Russia could have ordered from France some fifteen new Mistral-class helicopter assault ships ... or two Nimitz-class nuclear carriers in the US.”¹²¹

Analyst Dmitry Gorenburg argues that the rate of arms renewal has been 2% per year in recent years, and did not approach 11%—as called for by the procurement plan—even during the height of the Cold War. He also suggests that corruption and the advanced decay of much of the defense industry will make it extremely difficult to reach the goals set by the procurement plan over the next decade.¹²² Moreover, efforts to purchase weapons abroad to improve readiness face push-back from the powerful defense industry lobby.

Some critics argue that the new state armaments program retains too many elements of the military doctrine that call for a large land army and remains insufficiently focused on arming a slimmed-down professional military that can effectively carry out counter-terrorism and rapid-deployment missions. The program is aimed at threats that do not exist and threatens to drain funding from useful reforms such as boosting salaries and numbers of contract troops, they claim.

Demographics and Quality of Personnel and Training

In 2006, the Russian legislature reduced the then-two-year term of service to 18 months for those conscripted in 2007 and to one year from 2008 onward. The reduction was motivated by popular concerns about hazing and the risk that conscripted soldiers would be killed in the North Caucasus. The reduction in the term of service from two years to one year meant that the number of men conscripted each year needed to substantially increase, although the public expected that the planned expansion of voluntary service through contracts would reduce the need for such a large expansion of conscription. However, efforts to increase the number of contractees fell far short of expectations.

¹¹⁹ CEDR, June 15, 2011, Doc. No. CEP-950216.

¹²⁰ CEDR, July 6, 2011, Doc. No. CEP-358004.

¹²¹ Pavel Felgenhauer, “Solomonov Attacks Defense Ministry for Holding Back Funds,” *Eurasia Daily Monitor*, July 7, 2011.

¹²² Russia’s State Armaments Program 2020: Is the Third Time the Charm for Military Modernization?” October 12, 2010 by Dmitry Gorenburg

Due to the fall-off in births in the years just after the break-up of the Soviet Union, the cohort of draft-eligible men aged 18-27 recently has begun to decline. The yearly draft quota—about 440,000 in 2011—has become more and more difficult to fill given the declining age cohort, particularly as exacerbated by the large number of educational deferments and disqualifications due to medical conditions. Starting in 2009, the draft boards have been forced to admit many young men with criminal records in order to fulfill draft quotas. Up to one-third of young men recruited reportedly are physically weak, under-nourished, have mental disorders, are drug-addicts, or otherwise are medically unfit, or possess extremist (racist) attitudes or criminal records.¹²³

Foreseeing the shrinking age cohort, the Russian leadership had envisaged an increase in contract soldiers, but was unable or unwilling to raise salaries enough to attract enlistees. Also, many military leaders apparently were opposed on philosophical grounds to shifting to an armed forces where a substantial portion, if not all, troops were on contract.

In January 2011, the Defense Ministry called for an amendment to the Law on Military Duty to increase the number of months of the spring draft call-up period. Some Russian critics suggested that the move was a disguised means to increase service for many draftees to 18 months, perhaps as a preliminary to an open effort to increase the length of service for all conscripts. Perhaps indicating a clash of views, the presidential administration indicated in late March 2011 that it did not support the Duma bill, after it received an appeal from the chairman of the Presidential Council for Development of Civil Society Institutions and Human Rights, Mikhail Fedotov, to oppose it. The presidential administration instead called for the Duma to act on the president's request to enlarge the number of contract troops, which is planned to reach 425,000 by 2017. If this number is reached, then the number of conscriptees required for a 1-million-man army would be around 355,000 (the planned number of officers is 225,000), which would be more manageable given the demographic situation.¹²⁴

In late March 2011, Colonel General Valeriy Smirnov, the Deputy Chief of the General Staff, stated that although about 280,000 conscripts would fulfill their service in spring 2011 and be released from service, the Spring military draft would remain at slightly more than 200,000 conscripts, with the shortfall being made up by new efforts to attract contractees (of the conscripts, the bulk enter military service, but about 10%-15% are detailed to the Interior or Emergency Situations ministries). At the same time, he reported that about one-third of men called up for military service in Autumn 2010 proved to be unfit for service. Of the men deemed fit, one-half were not healthy enough for unrestricted service, he stated.¹²⁵ The Committee of Soldiers' Mothers has claimed that the military increasingly is inducting men with chronic conditions and even men from other Soviet successor states in order to meet quotas. The committee also alleged that police raids were conducted at higher educational institutions in 2010 to round up men who had legitimate deferments.¹²⁶

¹²³ CEDR, June 23, 2010, Doc. No. CEP-950137; *ITAR-TASS*, June 16, 2010. According to one report, the percentage of recruits with criminal records or a history of drug use ranged from 9-12% in call-ups in 2009-2010. CEDR, October 28, 2010, Doc. No. CEP-358004.

¹²⁴ Roger McDermott, "Sparrows," *Semantic Ingenuity and the Paralysis of the 'New Look' Russian Army*, *Eurasia Daily Monitor*, January 25, 2011; *Interfax*, March 24, 2011.

¹²⁵ CEDR, March 31, 2011, Doc. No. CEP-950072; *Interfax*, March 31, 2011.

¹²⁶ CEDR, March 18, 2011, Doc. No. CEP-358001.

In mid-July 2011, the Defense Ministry announced that it had fulfilled its goal of recruiting 218,000 men for military service. According to some observers, this level of recruitment is not sufficient to man what the Russian leadership claims is a 1-million-man armed forces.¹²⁷

Reportedly, the Defense Ministry decided not to draft a full complement of soldiers from the North Caucasus, because of alleged hazing by these soldiers against those of other ethnic groups (see directly below).¹²⁸ Of the 7,000 young men conscripted in Chechnya, the Defense Ministry reportedly permitted all of them to serve under the personal forces of republic President Ramzan Kadyrov, the only local leader of Russia permitted such a level of autonomy.¹²⁹ According to some estimates, the percentage of North Caucasian and other Muslims in the armed forces is already greater than their percentage of population, in part because of increased draft deferments and draft-dodging by ethnic Slavs. The percentage of Muslims in the armed forces is expected to increase as the population percentage increases. Some military leaders reportedly are concerned not only about hazing by North Caucasians in the military, but about the loyalty of these forces in the future if they are deployed to the North Caucasus or abroad.¹³⁰

Despite the reduction in the term of conscription to one year, hazing that culminates in death or serious injuries has unexpectedly increased, according to Fridinsky. He has warned that discipline is declining and that conscripts from different parts of Russia “are forming ethnic gangs that are criminalizing military units.” He stated that the increase in hazing could not be blamed on lowering the term of service to one year, but to the doubling of the number of draftees vis-à-vis contractees. This boosted draft cohort, he intimated, contained many more petty criminals. The cohort also reflects the prejudices of society, particularly ethnic and religious prejudices, that lead to violence in the barracks, he stated.¹³¹ He also decried the continued troubling number of suicides as well as noncombat deaths, which contribute to draft-dodging.

There are hopes that the entry of professional sergeants and military police into the armed forces will ameliorate some of these discipline problems, but a greatly ramped-up and sustained program will be necessary to train the tens of thousands of such sergeants that are needed for a 1-million-man armed forces, according to many observers. Thousands of military police also are needed. Although the Defense Ministry announced in 2010 that it planned to create military police, it was not until July 2011 that Serdyukov reported that a military police force attached to the Defense Ministry would begin deploying military police later in the year. Commenting on the creation of the military police force, Main Military Procurator Fridinskiy stated that it is “a necessary step to strengthen discipline and bring order to the troops, and will greatly assist in strengthening the rule

¹²⁷ “Walking Back the Draft,” *Russian Defense Policy*, April 1, 2011, at <http://russiandefpolicy.wordpress.com/tag/main-organization-mobilization-directorate/>.

¹²⁸ *CDR*, July 26, 2011, Doc. No. CEP-358011; Roger McDermott, “Russian Military Manpower: Recurring Zugzwang,” *Eurasia Daily Monitor*, December 14, 2010.

¹²⁹ *CDR*, August 1, 2011, Doc. No. CEP-546001.

¹³⁰ “World Armies: Russian Federation,” *Jane's World Armies*, June 17, 2011.

¹³¹ *Interfax*, March 25, 2011; Pavel Felgenhauer, “No Good Men, Weapons or Understanding of Modern Warfare in Russia”; *CDR*, February 28, 2011, Doc. No. CEP-37002; Iva Savic, “The Russian Soldier Today,” *Journal of International Affairs*, Spring 2010, pp. 219-230. According to Jane’s “The last comprehensive survey [in Russia] noted that four out of five conscripts face a beating by their officers or fellow soldiers at some point in their service, which for one in three will be serious enough to lead to hospitalization or a medical discharge. Another one in five will leave the army chronically ill as a result of poor diet, overcrowding and minimal medical and sanitary provision. After-action services and even long-term medical care are of poor quality, at best.” “World armies: Russian Federation,” *Jane's World Armies*, June 17, 2011.

of law," but he warned that military police would not be able to halt all crime within the military, since conscriptees will continue to reflect society.¹³² Some observers criticized the slow pace of creation of the force and skeptics warned that the military police could become tainted by the rampant corruption and violence in the armed forces.

According to some reports, military officers have become increasingly demoralized by coping with low-quality recruits, including those with low intelligence quotients and education levels, ill health, alcoholism and drug addiction, and criminal convictions. According to these reports, in addition to the problematic quality of recruits, the one-year term of service seriously limits training and reduces the amount of time that the recruit serves in an operational capacity. According to Felgenhauer, "brigades in which the men, NCOs, and specialists are wholly made up of conscripts who have completed just several months of service are cannon fodder, not an army."¹³³

The reforms have included some efforts to ameliorate popular prejudices disfavoring military service and reduce draft-dodging by out-sourcing nonmilitary duties and by slowly increasing the quality of rations and living conditions.

Assessments of Prospects for the Military Reforms

According to most observers, the reforms launched by Serdyukov have gone further than previous reform efforts in altering the force structure and operations of the armed forces inherited from the Soviet Union. However, because the reforms have experienced a number of adjustments and modifications, including some reversals, while being implemented and because of secrecy it is difficult to tell yet whether they will result in enhanced capabilities. President Medvedev has proclaimed that Russian conventional armed forces are more capable than they were in the 1990s and have reaffirmed Russia's status as a "great power," if not superpower, whose interests must be considered in all world affairs. German analyst Klein has defined the term "great power" as denoting not only that the country has a retaliatory nuclear weapons capability, but also has at least an even chance to emerge victorious in a conventional armed conflict with the strongest existing power and has global power projection capabilities. In these latter areas, she argues, Russia falls short of "great power" status. Even if the military reforms are mostly successful, she asserts, "Russia's lack of capabilities for global power projection" will not be fundamentally altered. Instead, she suggests, at best the reforms will improve the combat readiness of the armed forces in local and regional conflicts, in counter-terrorism, in combating insurrections in the North Caucasus, and in exercising military influence within the CIS.¹³⁴

Military modernization continues to face resistance from some Russian military theorists who want to restore a mobilization army, and this resistance may continue to stymie Serdyukov's reforms, according to some observers. These theorists argue that a substantial mobilization capability and large divisions, rather than smaller brigades, are needed to address the growing threat to Russia's vast Far Eastern borders posed by China. Reflecting this point of view, Russian defense analyst Aleksandr Sharavin, stressing that Russia has long borders with potential

¹³² CEDR, July 24, 2011, Doc. No. CEP-950030.

¹³³ CEDR, February 8, 2011, Doc. No. CEP-358003.

¹³⁴ Klein, *Russia's Military Capabilities: "Great Power" Ambitions and Reality*, p. 6.

enemies, has called for the draft to be maintained for the next two decades.¹³⁵ United Kingdom defense analyst Roger McDermott argues that the effort to create an active reserve indicates that some Russian decision-makers still think in terms of mobilization, so that the “the reform is now transmuting into a mixture of old and new.”¹³⁶ Jane’s similarly has argued that the ground forces still retain many elements of traditional tactics, “operating to carefully pre-developed battle plans, in large numbers, and relying on firepower and mass over speed, agility and flexibility,” in spite of Makarov’s efforts to develop network-centric modern warfare capabilities.¹³⁷

Analysts Dale Herspring and Roger McDermott believe that Serdyukov’s reforms will not be successful in creating a “modern fighting force” by 2020, since budget problems, production inefficiencies, and poor maintenance will inhibit reform efforts.¹³⁸ The reform process thus far, according to McDermott, “has resulted in inadvertently lowering combat capability and combat readiness.... A scarcely believable official line that ‘all is well’ with the reform fails to disguise the reality that for some time it has undergone a series of ‘corrections.’” These include the partial reversal in the decision to reduce the officer corps to 150,000 and differing proposals for the number of contract soldiers. McDermott points out that “officer downsizing was conducted too rapidly, while the goal to introduce new professional NCOs faltered, [and] the two reforms were not mathematically correlated.” He also warns that the military is finding it more and more difficult to fulfill its conscription needs, while its efforts to boost the number of quality contractees have faltered. He argues that “whatever the precise details of modernization include, a hybrid army has formed combining the salvageable elements of the original reform plan with the old army and its manifold problems.”¹³⁹ As one sign of these problems, even the 34th Separate Motorized Rifle (Mountain) Brigade, which became operational under the personal direction of then-President Putin at the beginning of 2008 and (as mentioned above) serves as a template for the brigade system, has had to give up its fully professional 5,000-man force. Currently, the force is mostly conscripts serving for 12 months, and reportedly struggles to train these troops to meet standards.¹⁴⁰

Implications for the United States

While some observers have argued that Russia’s military reforms do not pose a threat to U.S. interests, others maintain that the reforms do pose challenges, although they do not represent the reassertion of a Soviet-style threat. According to German defense analyst Margarete Klein, since Russia’s reforms do not involve greatly reducing the size of its military and greatly increasing defense budgets, the reforms will not result in the creation of fully modern armed forces. Further

¹³⁵ Thornton, *Military Modernization and the Russian Ground Forces*, p. 29; CEDR, May 11, 2011, Doc. No. CEP-358011.

¹³⁶ Roger McDermott, “Russia’s New Model Army: ‘Mobilization Reserves,’” *Eurasia Daily Monitor*, February 15, 2011.

¹³⁷ “World Armies, Russian Federation,” *Jane’s World Armies*, June 17, 2011.

¹³⁸ Dale Herspring and Roger McDermott, “Serdyukov Promotes Systemic Russian Military Reform,” *Orbis*, Spring 2010, pp. 284-310.

¹³⁹ Roger McDermott, “Russian Military Reform and the Unlikely Duet,” *Eurasia Daily Monitor*, March 1, 2011; “Gogol’s ‘Nose’ and Reversing Russian Military Officer Downsizing,” *Eurasia Daily Monitor*, February 7, 2011. See also *Russia’s Conventional Military Weakness and Substrategic Nuclear Policy*, U.S. Army, Fort Leavenworth, Kansas, Foreign Military Studies Office, n.d.

¹⁴⁰ CEDR, July 1, 2011, Doc. No. CEP-358007.

reductions in the size of the armed forces face strong resistance from military and political elites, and impulses for greatly boosted defense spending face competition from needed socio-economic modernization programs. Also, protecting parity in strategic nuclear capabilities vis-a-vis the United States remains the main priority of Russian defense spending. Klein also argues that defense industries have struggled to produce new weapons. She concludes that Russia's threat posture will "have a more demonstrative and symbolic quality rather than constituting realistic scenarios.... The gap between great power pretensions and reality in military affairs [will] continue to grow." However, the reforms may well boost Russia's regional power projection capabilities, which should make Europe more interested in the revival of conventional arms control efforts with Russia, she suggests.¹⁴¹

Similarly, Jane's has argued that U.S.-Russian relations are likely to remain good regardless of Russia's military reform efforts, because "Russian military capabilities and interests are focused almost exclusively upon relations with former members of the Soviet Union and potential secessionist movements" within Russia. Jane's also suggests that Russia's economic growth is constrained by world market demand for its oil and gas, and that Russia needs stable ties with these importers. Also, Russia's ability to "compete with U.S. power and influence" may be constrained by its aging and declining population and "its low ability to project naval power owing to lack of warm water access," Jane's argues.¹⁴²

Some analysts suggest that discussions by Russian officials about the threat from NATO may even be code for concerns about the growing strategic threat posed by China's increased military and economic power.¹⁴³ In examining the 10-year procurement plans for the Navy, Gorenburg argues that planners no longer view the United States and NATO as its primary potential opponents, but rather appear to focus on attempting to counter China and to combat piracy and instability along Russia's southern flank. The procurement plan emphasizes the construction of frigates, corvettes, and diesel submarines for the Pacific Fleet and the Black Sea Fleet, he argues, rather than large surface combatants and nuclear attack submarines.¹⁴⁴

Perhaps reflecting a view that Russian military reforms bear greater implications for U.S. interests, U.S. analyst Janusz Bugajski argues that Russia's strategic ambition is to be a Eurasian regional if not global superpower, equal in status, if not power, to the United States and EU and dominant in power and status to most other nations. The debilitation of Euro-Atlantic cooperation and the increase in influence over Europe remain primary Russian ambitions, in his view. While Russia has relied heavily on "soft power" (diplomatic, economic, political, and informational) tactics to advance its ambitions, it also endeavors to bolster its armed forces as an instrument to achieve its ambitions. Bugajski warns that such military pressure is "a serious threat to [Russia's] weaker neighbors" and other Western interests. He urges "a realistic appraisal of Russia's imperial

¹⁴¹ Klein, *Russia's Military Capabilities: "Great Power" Ambitions and Reality*. Polish defense analyst Robert Śmigielski likewise describes the extent of the military reforms so far as formalistic as long as the problems of creating a professional (contractee) military with modern weapons are not resolved. *Bulletin*, Polish Institute of International Affairs, August 22, 2011.

¹⁴² "North America: Relations with the Russian Federation," *Jane's Sentinel Security Assessment*, June 22, 2011.

¹⁴³ Thornton, *Military Modernization and the Russian Ground Forces*, p. 27.

¹⁴⁴ Dmitry Gorenburg, "Russian Navy Shifts Strategic Focus with China in Mind," *Russian Military Reform*, May 23, 2011, at <http://russiamil.wordpress.com/2011/05/23/russian-navy-shifts-strategic-focus-with-china-in-mind/>; *Oxford Analytica Brief*, February 2011.

[ambitions] and a thorough assessment of Moscow's diverse capabilities," in order to develop countervailing defense policies.¹⁴⁵

Seeming to support Bugajski's concerns about Russia's intentions, Felgenhauer argues that Russian decision-makers continue to regard the United States and NATO as the main threats to Russia and that military reforms aim to counter these perceived threats. He states (as mentioned above) that the creation of the Aerospace Defense Forces in 2011 was dictated by views that the United States has the capability and intention to launch an "air-space attack" with cruise missiles and other means against Russian leadership assets. Also, the August 2008 Russia-Georgia conflict convinced the Russian leadership that conventional military capabilities needed improvement to counter U.S. and NATO interference in possible future conflicts in Georgia or elsewhere. Disagreeing with what he claims are the views of these decision-makers, he asserts that "it seems illogical" that Russia is "spend[ing] hundreds of billions of rubles and turn[ing] aside resources from existing threats"—such as insurgency in the North Caucasus and possible Islamic extremist threats emanating from Afghanistan—to develop capabilities against these supposed threats. In actuality, he argues, the 2011 U.S. National Military Strategy indicates that "the Pentagon ... is not interested in confronting Russia," and that similar errant spending "bankrupted and destroyed the [Soviet Union]."¹⁴⁶

Perhaps representative of Russian decision-makers' views mentioned by Felgenhauer, Russian Duma deputy and defense analyst Aleksey Arbatov asserts that cruise missiles and other conventional means being developed and fielded by the United States to decapitate enemy command and control as part of net-centric warfare could be used against Russia. Mainly for this reason, Arbatov claims, the State Armaments Program for 2011-2020 stresses the building of offensive and defensive means to counter U.S. net-centric warfare. Also to address this claimed threat, he calls for future U.S.-Russia arms control talks to include conventional strike weapons and for a revival of the Conventional Arms Control in Europe Treaty. Perhaps providing evidence of such leadership concerns, the Shygy's military exercise between Russia and Kazakhstan, held in late June 2011, featured an attempt to intercept attacking enemy cruise missiles.¹⁴⁷

U.S. Policy Regarding Russia as a Military Threat

Since the Serdyukov reforms were launched in late 2008, U.S. policymakers have provided varying assessments regarding their potential threat to U.S. interests. In general, an ongoing policy of engagement with Russia has been followed in recent years along with a hedging strategy against the emergence of a more aggressive Russian military policy matched to capabilities.

In mid-2008, a bipartisan Congressional Strategic Posture Commission was formed as directed by the National Defense Authorization Act for FY2008 (H.R. 4986; P.L. 110-181). In its May 2009 report—issued early in the Obama Administration—it argued that the August 2008 Russia-

¹⁴⁵ Janusz Bugajski, "Russia's Pragmatic Reimperialization," *Caucasian Review of International Affairs*, Winter 2010, pp. 3-20.

¹⁴⁶ Pavel Felgenhauer, "The U.S. Threat Dominates Russian Defense Spending and Foreign Policy Decisions," *Eurasia Daily Monitor*, February 10, 2011. See also an interview with Major General Igor Sheremet, Deputy Chief of the General Staff and Chairman of the Military-Science Committee, in *CEDR*, May 31, 2011, Doc. No. CEP-37002.

¹⁴⁷ Roger McDermott, "Shygy's 2011: The Mysterious 'Hypothetical Opponent'," *Eurasia Daily Monitor*, June 28, 2011.

Georgia conflict, anti-Western statements by Russian officials, and other Russian behaviors created “uncertainty about the future of Russia’s political relationships with the West and thus the security threat it poses.” The commission observed that Russia no longer threatens Europe with a large land army and is not seeking nuclear supremacy, and that the overall risk of U.S.-Russian military confrontation is greatly reduced. However, it also warned that “these assessments might change for the worse at some future time, and the United States needs to hedge against that possibility.... Even as it works to engage Russia and assure Russia that it need not fear encirclement and containment, the United States needs to ensure that deterrence will be effective [and] continue to concern itself with stability in its strategic military relationship with Russia.” The commission claimed that “the sizing of U.S. forces remains overwhelmingly driven by Russia. This is ... because some of our allies see Russia as a potential threat and also because it retains the ability to destroy the United States.... Russia and the United States are certainly not enemies but neither are they allies.... The two are strategic partners on some important international questions, but strategic competitors on others.”¹⁴⁸

To improve what were viewed as cooling U.S.-Russia relations, the incoming Obama Administration launched what it termed a “reset” of bilateral ties in 2009. Reflecting this “reset,” the Obama Administration’s National Security Strategy (NSS), released in May 2010, asserts that the United States endeavors “to build a stable, substantive, multidimensional relationship with Russia, based on mutual interests. The United States has an interest in a strong, peaceful, and prosperous Russia that respects international norms.” The strategy calls for bilateral cooperation with Russia—termed one of the 21st century centers of influence in the world—in bolstering global nonproliferation; confronting violent extremism, especially in Afghanistan; forging new trade and investment arrangements; promoting the rule of law, accountable government, and universal values within Russia; and cooperating as a partner in Europe and Asia. At the same time, the strategy stresses that the United States “will support the sovereignty and territorial integrity of Russia’s neighbors.”¹⁴⁹

Similarly, the 2011 National Military Strategy, released by the Joint Chiefs of Staff in February 2011, stresses the national military objectives of countering violent extremism, deterring and defeating aggression, strengthening international and regional security, and shaping future military forces. It may allude to Russia in stating that “there are global and regional powers exhibiting nationalism and assertiveness that tests our partners’ resilience and U.S. leadership.” Specific references to Russia call for increasing “dialogue and military-to-military relations with Russia, building on our successful efforts in strategic arms reduction. We seek to cooperate with Russia on counter-terrorism, counter-proliferation, space, and Ballistic Missile Defense, and welcome it playing a more active role in preserving security and stability in Asia.”¹⁵⁰

In his 2011 threat assessment, Director of National Intelligence James Clapper testified to Congress on February 10, 2011, that Serdyukov’s defense reforms pose “both risks and opportunities for the United States and the West.” He warned that “Russian military programs are driven largely by Moscow’s perception that the United States and NATO are Russia’s principal strategic challenges and greatest potential threat.” In an apparent assessment of Russia’s

¹⁴⁸ *America’s Strategic Posture: The Final Report of the Congressional Commission on the Strategic Posture of the United States*, U.S. Institute of Peace, May 2009.

¹⁴⁹ The White House. *National Security Strategy*, May 2010.

¹⁵⁰ U.S. Department of Defense, Joint Chiefs of Staff, *The National Military Strategy of the United States of America: Redefining America’s Military Leadership*, February 8, 2011.

performance during the August 2008 Russia-Georgia conflict, he stated that the increase in Russia's conventional military capabilities and "a strategy of asymmetric and rapid response raise the specter of a more aggressive Russian reaction to crises perceived to impinge on Moscow's vital interests." At the same time, he raised the possibility that "as the Russian military continues its post-Soviet recovery and Moscow feels more comfortable asserting itself internationally, Russian leaders may be more inclined to participate in international peacekeeping operations," an apparent opportunity for U.S. engagement with Russia. He appeared to de-emphasize Russia's conventional military threat to Europe when he stated that the country's "still-significant conventional military capabilities, oriented toward Eastern Europe, the Caucasus, Central Asia, and the Far East, are intended to defend Russia's influence in these regions and serve as a 'safety belt' from where Russian forces can stage a defense of Russian territory."

At the hearing, Director Clapper also stated that "Russia's nuclear forces support deterrence and enhance Moscow's geopolitical clout." He specified that Russia still possesses "a very formidable nuclear arsenal [which] does pose ... potentially a mortal threat to us. I don't think they have the intent to do that." He also stated that China's nuclear forces pose such a potentially mortal threat. Upon questioning about which country might have more of a potential intention to harm U.S. interests, he stated that since the United States has concluded new START with Russia, "I would rank them a little lower [as a potential threat] because of that, and we don't have such a treaty with the Chinese." However, he stressed that while the two countries "may potentially have the capability to strike a mortal blow to us ... I don't think either country today has the intent to mortally attack us."¹⁵¹

As part of the Obama Administration's "reset" in U.S.-Russia relations, at the July 2009 U.S.-Russia Summit, the two sides agreed to the resumption of defense and military cooperation, which largely had been suspended since the August 2008 Russia-Georgia conflict. Admiral Mullen and General Makarov signed in Moscow a Military Framework document for cooperation between the countries' armed forces in July 2009. Under this framework, the United States has promoted cooperation in counter-terrorism, international peace-keeping, missile defense, search and rescue cooperation, crisis response exercises, and military education. This includes eliciting Russia's support for U.S. and ISAF operations in Afghanistan (see below), to advocate democracy and respect for human rights within Russian military, and also to assess Russian military reforms and civil-military relations. Reportedly, 67 events, exchanges, exercises, and consultations between the armed forces are planned for 2011.

Bilateral military cooperation also has been evidenced by the signing of a memorandum of understanding on counter-terrorism cooperation in May 2011 by Makarov and the Chairman of the Joint Chiefs of Staff, Admiral Mike Mullen. During Minister Serdyukov's visit to Washington, DC, in September 2010, he and then-Secretary of Defense Gates signed an agreement establishing the Defense Relations Working Group to foster engagement between the Russian Ministry of Defense and the Defense Department. This Working Group meets annually at the ministerial level, while its eight sub-groups, which cover topics from logistics to strategy, meet more frequently and have permitted the two countries to compare policies and practices. The public accounts of these meetings seem to indicate that Russia seeks knowledge of best practices as part of its defense reform effort. Among Russia's strategic cooperation with the United States, Russia facilitates the trans-shipment of U.S. nonlethal and lethal military equipment through its

¹⁵¹ U.S. Senate, Committee on Armed Services, Hearing on the Current and Future Worldwide Threats to the National Security of the United States, March 10, 2011.

land and air corridors in support of the Northern Distribution Network to Afghanistan, and has cooperated on other measures to enhance security in Afghanistan, including through collaboration in the NATO-Russia Council.¹⁵²

Congressional Concerns

Examination of the possible implications of Russia's military reform efforts falls under the jurisdiction of several congressional committees dealing with foreign affairs and armed services, and has included hearings dealing with the annual threat assessment, as mentioned above. In 2008-2009, Congress also formed a commission to examine and make recommendations with respect to the long-term strategic posture of the United States, as mentioned above, that as part of its deliberations also discussed the implications of Russia's national security and defense policy and its military reform efforts. Other hearings and specific legislation have addressed concerns about Russia's military operations in Georgia and its continued military occupation of parts of Georgia. The latter concern also has included Russia's continued unwanted military presence in Moldova, and to the broader issue of Russia's suspension of the Conventional Armed Forces in Europe Treaty, as mentioned above. Other concerns addressed by Congress have included the implications of the military reform plans on the sovereignty and security of other Soviet successor states and on Eastern European countries once occupied by Soviet forces, many of which are now NATO members and members of the OSCE. Congress will continue to pay close attention to Russian policy statements of intentions and to the actual outcome of the military reforms over the next few years, and to assess them within the context of broader Russian domestic and foreign policy and U.S. engagement with Russia on international issues of U.S. national security interest.

Table 4. Selected 2010 Defense Comparisons: Russia, the United States, China, and the United Kingdom

Country/Category	Russia	United States	China	United Kingdom
Defense Budget 2010-2011 (U.S. billion current dollars)	41.4	692.8	76.4	56.5
Defense Budget (% of Gross Domestic Product)	2.8	4.7	1.3	2.5
Active Manpower (million personnel)	1.0	1.6	2.3	0.2
ICBMs	376	450	66	0
Strategic Bombers	251	155	132	0
Ballistic Missile Nuclear-Powered Submarines	14	14	3	4
Main Battle Tanks	1,300	6,242	2,450	325
Armored Infantry Fighting Vehicles	4,960	6,452	2,390	526
Fourth-Generation Tactical Aircraft	897	3,324*	591	189

¹⁵² CRS Report RL33407, *Russian Political, Economic, and Security Issues and U.S. Interests*, coordinated by Jim Nichol.

Country/Category	Russia	United States	China	United Kingdom
Attack Helicopters	336	1,404	6-10	66
Aircraft Carriers, Cruisers, & Destroyers	26	92	13	8
Heavy/Medium Transport & Tanker Aircraft	192	1,284	75	72
Airborne Early Warning & Control Aircraft	20	104	8	6
Military Satellites	40	55	31	0

Source: International Institute of Strategic Studies, *The Military Balance 2011*, March 7, 2011.

*Also fields 168 fifth-generation tactical aircraft.

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