THE STATE OF RUSSIA’S STRATEGIC FORCES

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The substantial and ongoing modernization of Russia’s nuclear forces has enormous implications for U.S. national security and international stability. The matter has taken on an even greater significance in the aftermath of the Russian invasion and annexation of the Crimean Peninsula, and the Kremlin’s continuing military pressure on— and quiet invasion of— Eastern Ukraine. Ukraine’s Defense Minister has stated that, “Russia has threatened to use tactical nuclear weapons” against the Ukraine.1 There have also been reports that Russia plans to speed up its nuclear modernization programs.

Toomas Ilves, the President of Estonia, has summed up the current situation: “Everything that has happened since 1989 has been predicated on the fundamental assumption that you don’t change borders by force, and that’s now out the window.”9 Moreover, as Russian expatriate Alexei Bayer has observed, Putin’s Russia is “bursting with negative energy, hatred of the outside world and enthusiasm for confrontation.” 3

Russia sees nuclear weapons as central to its “great power” status, critical to its national security and a usable instrument of military power. Nuclear deterrence is incredibly popular in Russia, so much so that it has even been endorsed by the Patriarch of the Russian Orthodox Church.4 It is noteworthy that Russia has not announced strategic force eliminations in years. Indeed, during the 2010 Russian ratification of the New START Treaty, Russian Defense Minister Anatoliy Serdyukov said that Russia will increase the number of its deployed nuclear warheads and delivery vehicles up to the New START limits.5 Russia is now likely to build up to 2,000-2,500 strategic nuclear warheads, exploiting loopholes and counting rules in the treaty (which count an entire bomber-load of weapons as one weapon).6

GROWTH INDUSTRY

Russia still maintains legacy Soviet ICBMs (the SS-18, the SS-19 and the SS-25) and SLBMs (the SS-N-18 and the SS-N-23) through life extension programs. Russia modernized the SS-N-23 SLBM (Russia says it became operational in 2014)7 and the SS-19 ICBM has been tested with a “new warhead section.”

The core of Russian defense spending on strategic nuclear forces, however, has been on the development and deployment of new systems. In 2008, the Bush administration summarized Russian modernization as follows:

- a new road-mobile and silo-based Topol-M (SS-27) ICBM;
- a new SS-27 derivative with a Multiple Independently-targetable Re-entry Vehicle (MIRV) payload the Russians call the RS-24;
- a new Bulava (SS-30) SLBM;
- a new Borey-class Ballistic Missile Submarine (SSBN);
- a new long-range strategic nuclear cruise missile designated as the KH-102;
- modernization of Blackjack (Tu-160) heavy bombers;
- increased training for nuclear operations in all military branches; and
- upgraded nuclear weapons storage sites.8

At the time, comparable U.S. programs were literally zero, a situation that remains unchanged today. U.S. modernization programs are only partial,

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long-term and generally not under contract.9 Ironically, the lack of Russian interest in additional strategic or tactical nuclear arms control is explained in part by the asymmetry in modernization.10

A GROWING RUSSIAN STRATEGIC ARSENAL
Since 2008, the number of announced Russian strategic nuclear weapons development programs has more than doubled, increasingly rivaling the worst of the Soviet Union’s Cold War nuclear efforts. The Obama administration says Russia will deploy “several substantially MIRVed new strategic missiles,” including a “new ‘heavy’ ICBM to replace the SS-18 that will almost certainly carry several MIRVs.”11

Notably, Russia has announced that its new Sarmat heavy ICBM will be operational in 2018-2020. It reportedly will carry 10 heavy or 15 medium nuclear warheads.12 Major General (ret.) Vladimir Vasilenko, the former head of the Russian Defense Ministry’s Fourth Central Scientific Research Institute, recently said the Sarmat will be capable of attacking the U.S. over the South Pole.13 Colonel General (ret.) Viktor Yesin reports that the new heavy ICBM could put five tons of throw-weight into orbit.14 Since this is not the way ICBM throw-weight is normally measured, it could suggest that one version of the Sarmat will be a space weapon. In addition to the Sarmat, Russia has announced it is developing a new “ICBM” called the RS-26 Rubezh, with deployment of nine missiles scheduled for 2014.15 Sometimes called a “reduced range ICBM” in Russia, it appears to be an IRBM-range missile replacement for the Soviet-era SS-20 IRBM eliminated under the INF Treaty. At a minimum, the RS-26 circumvents a basic prohibition in the INF Treaty and it may violate the INF Treaty or New START.16 The Air Force’s National Air and Space Intelligence Center lists its range at about half that of any other Russian “ICBM.”17

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Indeed, Russia, through violations and circumventions, appears to be recreating the Soviet-era intermediate-range missile capability. In January 2014, the New York Times reported Russian testing of an INF Treaty-prohibited ground-launched cruise missile—a story that was subsequently confirmed by the State Department.18 In July 2014, the Obama administration formally determined, “…that the Russian Federation is in violation of its obligations under the INF Treaty not to possess, produce, or flight-test a ground-launched cruise missile (GLCM) with a range capability of 500 km to 5,500 km, or to possess or produce launchers of such missiles.”19 In June 2014, Russia’s official RIA Novosti news agency said the Russian Army “currently uses” its Iskander-M and Iskander-K (the Iskander K is apparently the prohibited cruise missile).20

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Russian INF compliance issues discussed in the Russian media include the INF-range cruise missile, the RS-26 “ICBM,” the reported Iskander-M range (up to 1,000-km range), the reported retention of the Soviet-era Skorost IRBM (never declared under the INF Treaty) and the reported surface nuclear attack capability of Russian surface-to-air missiles and missile defense interceptors. If these reports are true, the
INF Treaty is effectively dead with regard to limiting Russia’s INF-range forces. Concerning the cruise missile, General Philip Breedlove, the Supreme Allied Commander Europe (SACEUR), has stated that “A weapon capability that violates the I.N.F [Treaty] … is absolutely a tool that will have to be dealt with.”

Russia has also announced the development of a rail-mobile ICBM. The New START Treaty’s mobile ICBM launcher definition was literally changed to exclude rail-mobile ICBMs. If deployed, this would provide Russia with an option to have in its arsenal a large force of RS-26s, or any other ICBMs, outside of arms control constraints. In addition, there are a number of other programs being discussed in the Russian press, although it is not clear exactly what these missiles are or their status.

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Work is reportedly underway in Russia on the development by 2020 of a 5th generation missile submarine which will reportedly carry ballistic and cruise missiles. Russia is also developing a new stealth bomber, probably for deployment in the 2025-2030 timeframe. Russian President Vladimir Putin has said the new bomber will carry cruise missiles, and a recent report says hypersonic missiles.

Russia’s production of strategic nuclear missiles, meanwhile, has been significantly increased. Since 2011, announced Russian ICBM deployment numbers indicate that the production rate has increased 3-4 times. (The comparable U.S. number is zero.) In February 2012, President Putin said Russia would procure more than 400 new ICBMs by 2020. Russia says it will modernize 98% of its ICBM force by 2021. The eight Borey-class missile submarines are supposed to be operational by 2020. The comparable U.S. number is again zero.

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And, in stark contrast to U.S. policy, Russia says it is developing new types of nuclear weapons and this, reportedly, is being carried out through hydro-nuclear (very low yield) testing. For example, in 2005, then-Defense Minister Sergei Ivanov declared, “We will develop, improve and deploy new types of nuclear weapons.” Russian press reports say Russia is developing, or in some cases has deployed, a new single warhead, a new small MIRV warhead, precision low yield nuclear weapons and “clean” nuclear weapons. Unlike the U.S., Russia maintains a fully functional nuclear weapons complex that reportedly can produce 2,000 weapons a year.

The Obama administration estimates Russia has 4,000-6,500 nuclear weapons. Russian press estimates are frequently higher. Russia has retained ten times as many tactical nuclear weapons as the U.S., and it has retained virtually every type of Cold War tactical nuclear weapon. According to former Duma Defense Committee Vice Chairman Alexei Arbatov, the list includes short-range nuclear missiles, nuclear artillery, nuclear landmines, nuclear air and missile defense weapons, nuclear anti-ship missiles and bombs, nuclear depth charges, nuclear antisubmarine...
warfare missiles, nuclear torpedoes, nuclear bombs, coastal missile complexes, and the missiles of the Russian Air Force’s and Navy’s non-strategic aviation.\textsuperscript{35} The U.S. tactical nuclear stockpile, by contrast, has been reduced to a single type of bomb, the B-61. Significantly, Russia is now also modernizing its tactical nuclear force.\textsuperscript{36} Russia clearly can launch types of nuclear attacks that the U.S. can’t duplicate, and, hence, may not be able to deter.

Asymmetry in capability, numbers and modernization is even more dangerous because of Russian attitudes toward first use of nuclear weapons. In fact, Russian military doctrine allows for first use of nuclear weapons in local or regional conventional wars.

Despite commitments in the 1991-1992 Presidential Nuclear Initiatives, Russia, according to the country’s generals, has maintained battlefield nuclear weapons and is reportedly modernizing them.\textsuperscript{37} In 2009, the third ranking general in the Russian Defense Ministry affirmed that the new Russian Iskander-M tactical missile is nuclear capable.\textsuperscript{38} More recently, the Iskander is known to have been launched in October 2013 and May 2014 as part of large strategic nuclear exercises.\textsuperscript{39} As a result, in the words of a popular Moscow weekly, “The Russian tactical nuclear arsenal dominates Europe…”\textsuperscript{40}

**NUCLEAR BRINKSMANSHIP IN MOSCOW**

This asymmetry in capability, numbers and modernization is even more dangerous because of Russian attitudes toward first use of nuclear weapons. In fact, Russian military doctrine allows for first use of nuclear weapons in local or regional conventional wars.\textsuperscript{41} In December 2009, then-Commander of the Strategic Missile Troops Lieutenant General Andrey Shvaychenko, declared that “In a conventional war, they [the Strategic Nuclear Forces] ensure that the opponent is forced to cease hostilities, on advantageous conditions for Russia, by means of single or multiple preventive strikes against the aggressors’ most important facilities. In a nuclear war, they ensure the destruction of facilities of the opponent’s military and economic potential by means of an initial massive nuclear missile strike and subsequent multiple and single nuclear missile strikes.”\textsuperscript{42} As the U.S National Intelligence Council observed in December 2012, “Nuclear ambitions in the US and Russia over the last 20 years have evolved in opposite directions. Reducing the role of nuclear weapons in US security strategy is a US objective, while Russia is pursuing new concepts and capabilities for expanding the role of nuclear weapons in its security strategy.”\textsuperscript{43}

Russian views are important because Russian military doctrine holds that Russian first use of low yield nuclear weapons “will not result in immediate nuclear war.”\textsuperscript{44} A declassified CIA report links Russian nuclear doctrine to its new weapons: “Moscow’s military doctrine on the use of nuclear weapons has evolved and probably has served as the justification of the development of very low yield, high precision nuclear weapons.”\textsuperscript{45}

**A PERILOUS IMBALANCE**

Russian leaders routinely make threats of nuclear attack. This includes threats of preemptive nuclear attack and targeting of nuclear missiles on named countries, which President Putin himself has done several times.\textsuperscript{46} Russia constantly exercises its nuclear forces, including drills involving the first use of nuclear weapons, against the U.S and NATO.\textsuperscript{47}
local and regional conventional wars; and 4) making blatant nuclear threats. This is quite a dangerous combination of policies, ones that could lead to a major European War with great risk miscalculation and, possibly, nuclear escalation. Noted Russian journalist Pavel Felgenhauer writes, “…our superiors are potentially ready to burn all of us in nuclear fire because of disputes over ice, rocks or South Ossetia.”48 Hopefully, they will be more restrained than their words indicate, but hope is not a security policy.

ENDNOTES


October 2014, ISSUE 12


42. “Russia may face large-scale military attack, says Strategic Missile Troops chief,” ITAR-Tass, December 16, 2009.


October 2014, ISSUE 12