

1. Role of Nuclear Weapons
2. Current Nuclear Force
3. Nuclear Treaties
4. The Future of START I/SORT
5. Conclusions
6. Diagrams

1. **The Multiple Roles of Russian Nuclear Weapons**

During the Cold War, Soviet Russia enjoyed superpower status alongside the United States. As one of the two main actors, the world looked upon the Soviet Union as a major hegemon, according Moscow with the respect that comes from possessing enormous military power. Today, Russia looks to recapture some of that status. Although there are some military commanders who would prefer a smaller and more modernized nuclear force, many of the Kremlin elite believe that a substantial arsenal of nuclear weapons is the only way to achieve some fashion of their former status.<sup>1</sup>

President of the Russian Academy of Geopolitical Problems Colonel-General Leonid Ivashov argues that "...nuclear weapons force American presidents to fly to Moscow, put on a show of respect for Russia, and conduct negotiations on world, regional, and bilateral problems."<sup>2</sup> This mindset has become evident over the last few years by increased Russian military posturing. In February 2008, a Russian bomber "buzzed" an American naval carrier until it was escorted from the area by the U.S. Air Force. This was not an isolated incident; during the latter half of 2007, more than 120 NATO fighters intercepted Russian aircrafts.<sup>3</sup> Such test flights and public admissions underscore Russian officials' need for global attention. Many Russian officials believe that if they posture enough, Russia will once again be seen as a formidable opponent, rather than as a deteriorating former superpower.

To many Russians, nuclear weapons are also the only way to maintain security, sovereignty, and independence.<sup>4</sup> There has been a resurgence of the Russian economy since its collapse in the 1990s, mainly because of the increasing prices of oil. This has enabled the former Soviet nation to maintain its aging nuclear arsenal, which it has opted to do at the cost of failing to modernize its conventional forces. Many in the international community worry about the role of Russia's nuclear weapons. Russia's new military doctrine, however, may allay some of those concerns.

In 2000, Russian officials outlined a vague military doctrine. It allowed for the use of nuclear weapons in "situations critical for the national security of Russia." These situations were defined as "regional wars," or wars that involve significant forces which affect a large region or coalition of states, and "large-scale wars," or essentially a new world war involving the great powers.<sup>5</sup> In an October 2009 interview, Secretary of the Russian Security Council Nikolai Patrushev implied that the new military doctrine may allow for the use of nuclear weapons in "local wars," not just regional and large-scale wars.<sup>6</sup> This would have broad implications, as Russian officials, if they adopted this stance, may have felt justified in using nuclear weapons in skirmishes similar to the Georgian crisis in 2008. Given Russia's deteriorating conventional capability, this was not an unimaginable scenario. On 5 February 2010, however, Russia

published its new military doctrine, which limited, rather than broadened, the scope of nuclear weapons.

The new doctrine avers the “right to use nuclear weapons in response to a use of nuclear or other weapons of mass destruction against her and (or) her allies, and in a case of an aggression against her with conventional weapons that would put in danger the very existence of the state.”<sup>7</sup> The policy does not permit the use of nuclear weapons in the event of a “local conflict,” as Secretary Patrushev hinted it would. In fact, it limits the employment of the nuclear arsenal more than the 2000 doctrine. Whereas in 2000, Russia permitted the use of nuclear weapons “in situations critical for the national security of Russia,” now the doctrine states that they may only be used when Russia is faced with an imminent existential threat. While it is not a large departure from the old policy, the new policy limits the role of nuclear weapons, and thus sets a new tone for Russian security policy.<sup>8</sup> The United States should seize this opportunity to craft a newly adopted START treaty with Russia, and work to make the limits set out by the agreement a reality.

## 2. **Treaties**

### **START I**

The Soviet Union and the United States signed the Strategic Arms Reduction Treaty (START I) in 1991, and the agreement went into force in 1994. The treaty reduced each nation’s nuclear arsenal to a maximum of 6,000 warheads and 1,600 delivery vehicles. Superfluous delivery systems were to be destroyed. The treaty provided detailed verification measures, including on-site inspections and the exchange of information (e.g., telemetry data from missile tests) between the two states. Russia and the United States completed reductions in December 2001.

START I expired 5 December 2009; Russia and the U.S. continue to work on a follow-on agreement. In the meantime, both sides have agreed to abide by the spirit of the expired treaty. The U.S. agreed to remove its inspectors at the Russian missile production facility in Votkinsk where they have maintained a portal perimeter monitoring system since START I was inaugurated. Russia never exercised its right to maintain inspectors at the Thiokol missile production plant in Promontory, Utah, and in any event lost any inspection rights in regard to missile production a year after the US stopped producing Peacekeeper missiles (i.e., April 2001).<sup>9</sup>

In July 2009, President Obama and President Medvedev announced that the successor to START will limit each nation to 1,500-1,675 deployed strategic arsenals and 500-1,000 delivery vehicles.<sup>10</sup> One of the major issues U.S. and Russian officials are debating is the extent to which future START reductions will be linked to U.S. willingness to accept limits on deploying missile defense systems.

### **START II**

The U.S. and Russia signed START II in January 1993. This agreement sought to reduce deployed strategic arsenals to 3,000-3,500 nuclear warheads. Of these, only 1,750 warheads could be deployed on sea-launched ballistic missiles (SLBMs). Under START II, no intercontinental ballistic missile (ICBM) could be “MIRV’d,” (outfitted with multiple independently targetable reentry vehicles). MIRV’d SLBMs were permissible under the treaty, however.<sup>11</sup> Verification measures were to be instituted in the same way as outlined in START I. Implementation was set to occur in January 2003, but in 1997 the treaty was delayed until 2007 for fear Russia would be unable to meet the 2003 deadline. In 1997 the Senate failed to ratify protocol allowing for this delay as well as agree to several amendments to the Anti-Ballistic

Missile (ABM) Treaty. The Russian Duma required the U.S. Senate ratify the protocol before any steps at nuclear reductions took place. Both Russia and the U.S. ratified START II, but the treaty was abandoned before it entered into force. START II was rendered moot when the U.S. unilaterally withdrew from the ABM Treaty in 2003.<sup>12</sup>

### **SORT**

The Strategic Offensive Reductions Treaty (SORT or the Moscow Treaty) is an agreement between the United States and Russia reached in 2002. SORT requires that each nation reduce its number of operationally deployed strategic warheads to an aggregate number not to exceed 1,700 to 2,200 by 2012, when the treaty expires. Unlike START, SORT does not limit the number of delivery vehicles. SORT does not include any specific verification measures; START verification measures were foreseen to provide ample means to verify SORT compliance. Not until a follow-on START regime is successfully negotiated and ratified will each side be in a position to verify SORT compliance.<sup>13</sup>

## 3. **Current Nuclear Forces**

### **Russia**

As of 2009, Russia maintains a sizeable nuclear arsenal. According to the Bulletin of Atomic Scientists, Russia has 4,830 operational nuclear warheads, of which 2,787 are strategic warheads, with an additional 8,150 on reserve. 1,355 of the 4,830 operational warheads are MIRVs on ICBMs. Russia also maintains ten nuclear-powered ballistic missile submarines (SSBNs) with 160 SLBM launchers outfitted with 576 warheads. 77 strategic bombers, which carry 856 warheads, complete Russia's nuclear triad. (For a complete breakdown of Russian nuclear forces see Diagram A).<sup>14</sup>

The Russians have manufactured an estimated six new Topol-M missiles for a year for the past decade, with each carrying only one nuclear warhead. The Topol-M is a three-stage solid-fuel ICBM with a range of 11,000km. It is an "advanced version of the silo-based and mobile Topol [ICBM]."<sup>15</sup> Since it is highly mobile and can be launched from anywhere, the Topol-M has a high degree of survivability.<sup>16</sup> Given the expiration of START, Russian officials claim these missiles will now be equipped with multiple warheads and subsequently referred to as RS-24s. Moscow also wishes to deploy eight Borey class submarines by 2010-2011, which will carry 600-700 warheads. The Tu-160 Blackjack bombers are also set to double from 14 to 28 within the next ten years, which could carry between 400-500 nuclear warheads.<sup>17</sup> At this level, Russia would hold between 1,400 and 1,600 nuclear warheads, which is still within SORT limits.

### **United States**

The United States currently maintains a larger nuclear arsenal than Russia. The arsenal consists of 5,200 nuclear warheads. Of those, 2,700 are operational warheads—2,200 of which are strategic weapons with a remaining 500 devoted to nonstrategic warheads. The U.S. holds 2,500 additional warheads on reserve with approximately 150 spares. 4,200 warheads have yet to be dismantled from the Bush administration's 2004 declaration of a 50% reduction in the nuclear stockpile by 2012. By December 2007, the reductions were complete; another 15% reduction is scheduled to be completed by 2012. This will leave the United States nuclear arsenal with approximately 4,600 warheads. The deployed operational warheads arsenal is comprised of 500 warheads on 450 ICBMs, 1,152 warheads on 288 SLBMs, 500 warheads on 113 bombers, and 500 warheads on 325 nonstrategic forces.<sup>18</sup>

## 4. **The Future of START I/SORT**

START I has already expired, but prospects look good for the US and Russia to reach agreement on a follow-on treaty. However, ratification by the US Senate is not a sure thing. In the U.S., a new treaty faces stiff opposition, and President Obama will have to use major political capital to ensure its passage. American conservatives want to maintain unimpeded deployments of missile defenses, while Russia seeks to link future nuclear reductions to constraints on such systems. Republicans may be persuaded to ratify a new treaty with the promise of the modernization of the nuclear arsenal, although nonproliferation proponents argue that “modernization” means “new weapon creation.”<sup>19</sup> President Obama can present a persuasive case by acknowledging that a new treaty is in keeping with current American security interests. A successor to START I will keep America at the forefront of nonproliferation and promote increased transparency via verification measures, which will stabilize relations between the U.S. and Russia.

Russia is losing its ability to maintain its nuclear forces. It is not in Russian interest to lose parity with the United States’ arsenal. Russians are extremely paranoid about the prospect of a conventional war against superior U.S. forces, the idea of which, to American leaders, seems preposterous. If President Obama wishes to seriously engage the Russian government in reciprocal nuclear arms reductions, he must promote bilateral talks and increase transparency. The missile defense debate is the most contentious, but both Presidents agreed in the July 2009 Moscow summit to formulate a cooperative effort. Included in President Obama’s new approach to missile defense is a statement that the U.S. is willing to cooperate with Russia on this issue.<sup>20</sup> Now is the time to make this a reality through honest dialogue and real action. The worst thing the U.S. can do right now is ignore the former Soviet state. This will only push Russia into former isolation and unwillingness to consent to a new agreement. If the U.S. and Russia can craft a successful policy jointly, it will make Russia a more amenable partner in larger global issues.

## 5. **Conclusion**

Russia wants to be a major player on the world stage again, and many officials believe that maintaining a large nuclear arsenal is the only way in which to achieve this goal. Both the U.S. and Russia have made strides with the START I and SORT treaties, but unless the terms of START are extended and the levels of SORT enforced, the future of formal strategic arms control is problematic. The Kremlin has made a good faith effort in its new military doctrine, which limits the use of nuclear weapons. This is a promising sign, though the issue of missile defense still hampers negotiations and prospects for deeper nuclear reductions in future U.S.-Russian negotiations. Throughout the spring, I intend to monitor the development of the Russian nuclear program and U.S.-Russian relations in regards to arms reductions treaties.

6. **Diagrams**

A. Breakdown of 2009 Russian nuclear forces:

Type	Name	Launchers	Total Warheads
<b>ICBMs</b>			
SS-18	Satan	68	680
SS-19	Stiletto	72	432
SS-25	Sickle	180	180
SS-27 (silo)	(Topol-M)	50	50
SS-27 (mobile)	(Topol-M1)	13	13
SS-27 (mod.)	(RS-24)	0	0
		<b>383</b>	<b>1355</b>
<b>SLBMs</b>			
SS-N-18 M1	Stingray	4/64	192
SS-N-23	Skiff	3/48	192
SS-N-23 M1	Sineva	3/48	192
SS-N-30	Bulava	1/16*	0
		<b>10/160</b>	<b>576</b>
<b>Bombers/Weapons</b>			
Tu-95 MS6	Bear-H6	32	192
TU-95 MS16	Bear-H16	31	496
Tu-160	Blackjack	14	168
		<b>77</b>	<b>856</b>
<b>Total</b>			<b>2,787</b>
		*Not yet deployed	

\*\*Numbers taken from Kristensen, Hans M. and Robert S. Norris, "Nuclear Notebook: Russian Nuclear Forces, 2009," *Bulletin of Atomic Scientists*, May/June 2009, vol 65, no. 3, pp. 55-64.

<sup>1</sup> Matthews, Owen and Anna Nemtsova. "The New Red Army: How Medvedev plans to reform the military—and why Obama should not be worried." *Newsweek*. November 30, 2009.

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- <sup>2</sup> "General Ivashov Argues Russia Needs 'Not Less Than 1,700 Nuclear Warheads,'" from *Nezavisimaya Gazeta*, text provided by *BBC Monitoring Former Soviet Union*, July 6, 2009.
- <sup>3</sup> Kristensen, Hans M. and Robert Norris, "Nuclear Notebook: Russian Nuclear Forces, 2008," *Bulletin of Atomic Scientists* (May/June 2008): 54-57, 62.
- <sup>4</sup> Fedorov, Yury. "Russia 'New' Inconsistent Nuclear Thinking and Policy." *The Long Shadow: Nuclear Weapons and Security in 21<sup>st</sup> Century Asia*. Ed. Muthiah Algappa. (California: Stanford University Press): 2008.
- <sup>5</sup> Sokov, Nikolai, "The New, 2010 Russian Military Doctrine: the Nuclear Angle," *James Martin Center for Nonproliferation Studies*, [http://cns.miis.edu/stories/100205\\_russian\\_nuclear\\_doctrine.htm](http://cns.miis.edu/stories/100205_russian_nuclear_doctrine.htm), February 5, 2010.
- <sup>6</sup> Ibid.
- <sup>7</sup> Ibid.
- <sup>8</sup> Ibid.
- <sup>9</sup> Elaine M. Grossman, "U.S. Treaty Monitoring Presence at Russian Missile Plant Winding Down," NTI Newswire, Nov. 20, 2009, [http://gsn.nti.org/gsn/nw\\_20091120\\_8953.php](http://gsn.nti.org/gsn/nw_20091120_8953.php).
- <sup>10</sup> Elaine M. Grossman, "Talks Hit 'Sweet Spot' for Landing New START Agreement, U.S. Official Says," *Nuclear Threat Initiative*, [http://www.globalsecuritynewswire.org/gsn/nw\\_20100113\\_6737.php](http://www.globalsecuritynewswire.org/gsn/nw_20100113_6737.php), January 13, 2010.
- <sup>11</sup> "U.S.-Russian Treaties & Agreements," *Nuclear Threat Initiative*, [http://www.nti.org/f\\_WMD411/f1b2\\_2.html](http://www.nti.org/f_WMD411/f1b2_2.html), February 2010.
- <sup>12</sup> Tom Collina, "U.S.-Soviet/Russian Nuclear Arms Control Agreements at a Glance," *Arms Control Association*, December 2009, <https://www.armscontrol.org/factsheets/factfiledec09>.
- <sup>13</sup> Kimball, Daryl G. and Philipp Bleek, "Experts Call Nuclear Arms Treaty a Missed Opportunity, Urge Pursuit of Comprehensive Nuclear Risk Reduction Strategy." *Arms Control Association*. <https://www.armscontrol.org/aca/sortmay02>, May 24, 2002.
- <sup>14</sup> Kristensen, Hans M. and Robert S. Norris, "Nuclear Notebook: Russian Nuclear Forces, 2009," *Bulletin of Atomic Scientists*, (May/June 2009): 55-64.
- <sup>15</sup> "RT-2UTTH, Topol-M, SS-27," *Globalsecurity.org*, <http://www.globalsecurity.org/wmd/world/russia/rt-2pmu.htm>.
- <sup>16</sup> Ibid.
- <sup>17</sup> Podvig, Pavel, "Russia's New Arms Development," *The Bulletin of Atomic Scientists: The Bulletin Online*, [http://russianforces.org/podvig/2009/01/russias\\_new\\_arms\\_development.shtml](http://russianforces.org/podvig/2009/01/russias_new_arms_development.shtml), January 16, 2009.
- <sup>18</sup> Robert S. Norris and Hans M. Kristensen, "U.S. Nuclear Forces, 2009," *Bulletin of the Atomic Scientists*, March/April 2009, vol. 65, no.2, pp. 59-69.
- <sup>19</sup> Ibid.
- <sup>20</sup> Oliver Thränert, "NATO, Missile Defense and Extended Deterrence," *Survival*, December 2009-January 2010, vol. 51 no. 6, pp. 63-76.