

## Will Russia Build 8,000 Nuclear Weapons by 2026?

Mark B. Schneider, Real Clear Defense, January 26, 2018, https://www.realcleardefense.com/articles/2018/01/26/will\_russia\_build\_8000\_nuclear\_weapons\_by\_2026\_112963.html

In December 2017, Bill Gertz reported, "Russia is aggressively building up its nuclear forces and is expected to deploy a total force of 8,000 warheads by 2026 along with modernizing deep underground bunkers, according to Pentagon officials. The 8,000 warheads will include both large strategic warheads and thousands of new low-yield and very low-yield warheads to circumvent arms treaty limits and support Moscow's new doctrine of using nuclear arms early in any conflict."[1] This is quite plausible. Existing Russian programs can support the deployment of 8,000 or more nuclear weapons with an emphasis on either strategic or non-strategic (tactical) nuclear weapons or both.

Russia has a nuclear weapons production complex that is clearly able to produce and sustain a stockpile of 8,000 or more nuclear weapons. Russia can produce 1,000 nuclear "pits" a year which translates into the ability to produce 1,000 complete new nuclear weapons per year. [2] Also, it has mothballed the ability to produce 2,500 more. [3] With a weapons life of 10-20 years, according to former Russian Atomic Energy Minister Viktor Mikhaylov, [4] 1,000 pits a year permits a force of 10,000-20,000 nuclear weapons.

The Russian Government has announced over twenty strategic nuclear modernization programs.[5] Even more significant in terms of how many nuclear weapons Russia is planning to build is the very large number of warheads that will be carried on each type of new or modernized strategic missiles. Most notable is the new Sarmat heavy ICBM which will carry, according to TASS, "at least 15 warheads." [6] The new version of the Soviet legacy SS-N-23, the Sineva, reportedly can carry double the number of warheads for which the SS-N-23 was limited to under the START Treaty. [7] Not satisfied with this, Russia went on to develop, test and deploy a second new version of the SS-N-23, the Liner (sometimes translated as Layner) which, according to Russian press reports, can carry 10 warheads.[8] The new Bulava-30 SLBM was declared to carry six warheads under the START Treaty, but reports are quite common in Russia that it, and the new RS-24 Yars ICBM, will carry ten warheads.[9] (This would likely require a new smaller RV). Russia has gone in exactly the opposite direction as the U.S. which has downloaded its strategic missiles. It is simply impossible for Russia to deploy uniformly anywhere near these warhead numbers under any arms control regime, which suggests Russia is planning to deploy many nuclear warheads outside of arms control constraints by cheating or breakout.

In December 2017, *TASS* quoted well connected Russian journalist Colonel (ret.) Viktor Litovkin as saying that Russia "...has five hundred strategic missiles carrying over 1,800 nuclear warheads," which is 239 more warheads and about seventy more deployed missiles than Russia claims it had in September 2017.[10] An excellent 2015 study by James R. Howe concluded that Russia had the potential to deploy 2,664-5,890 warheads on its ballistic missiles.[11] These are not worst-case numbers. The large throw-weight of some Russian missiles could permit very large numbers of small nuclear warheads to be carried. For example, in 2010, *ITAR-TASS* reported the Russian SS-18 heavy ICBM "can deliver up to 36 warheads..."[12] The new Sarmat ICBM will have more throw-weight (10,000-kg)[13] than the SS-18. Howe's estimate is based on official disclosures and Russian press reports concerning its plans for the new or modernized strategic missiles. In December 2017, he estimated that Russia would have 8,000 nuclear weapons in six years, a mix of high-yield, medium-yield, and low-yield nuclear warheads.[14]

Russia's legacy Soviet heavy bomber force can carry about 850 nuclear warheads. [15] In 2022, Russia will be in the early stages of producing 50 new Tu-160M2 bombers at a rate of several per year. [16] In 2026, Russia will certainly be in the process of adding new strategic ballistic missiles. Russia will have finished the Borey A program and will be building new Borey B class ballistic missile submarines (reported IOC to be in 2026) and will later produce the new Husky class ballistic missiles submarines (construction start reported to be in 2023-2024) and PAK D stealth bombers (first flight reported to be in 2023). [17] There are also likely to be new programs that have not yet been disclosed. Hence, the number of deployed strategic nuclear weapons will almost certainly go well over 3,000 and continue to increase even if Russia does not deploy the maximum reported warhead loads on each of its missile types. While Russian IOC dates are often delayed, this will not change any of the trends outlined above.

The Russian Federation clearly has thousands of non-strategic weapons. [18] In 2011, the U.S. Defense Department estimated Russia had between 2,000-4,000 tactical nuclear weapons. [19] Russia claims to have reduced its tactical nuclear weapons inventory by 75% from Cold War levels. [20] Similar or identical claims were made in the review conferences for the Nuclear Non-Proliferation Treaty (NPT) for about 15 years. This is significant because the P-5 states (the U.S.,

Russia, China, France and Great Britain) bend over backward to detail their nuclear weapons cuts during the NPT review conferences, yet Russian claims about non-strategic nuclear weapons reductions remained the same. [21] (Since their number of strategic warheads had increased, Russia resorted to an apples and oranges comparison of a number of warheads accountable under the START Treaty and the New START Treaty, despite completely different counting rules.) Since Alexei Arbatov, a Russian expert and former Vice Chairman of the Duma Defense Committee, and others (e. g., Graham Allison) have said that the late Cold War Soviet tactical nuclear arsenal constituted 22,000 tactical nuclear weapons, [22] this would mean Russia has retained 5,000+ tactical nuclear weapons. Indeed, in 2014, *Pravda.ru* reported, "Russia, according to conservative estimates, has 5,000 pieces of different classes of TNW [tactical nuclear weapons] - from Iskander warheads to torpedo, aerial and artillery warheads!"[23] In 2013, Alexei Arbatov indicated that the Russian arsenal of "nonstrategic nuclear assets (mediumrange aviation, operational-tactical aircraft and missiles) are classified, but unofficial estimates

range from 2,000 to 3,000 operationally deployed nuclear weapons, a considerable segment of which can also hit targets in regions adjoining Russia."[24] "Operationally deployed" is a term associated with the 2002 Moscow arms control Treaty. It does not count the entire weapons inventory but only those weapons actually attached to delivery systems or stored at operational bases. Moreover, Arbatov has never counted Russian non-strategic warheads that he knows violate arms control commitments.

The Russian tactical nuclear arsenal is amazingly diverse. According to the 2017 Defense Intelligence Agency report on *Russia Military Power*, Russian tactical nuclear weapons "...include air-to-surface missiles, short-range ballistic missiles, gravity bombs, and depth charges for medium-range bombers, tactical bombers, and naval aviation, as well as anti-ship, anti-submarine, and anti-aircraft missiles, and torpedoes for surface ships and submarines. There may also be warheads remaining for surface-to-air and other aerospace defense missile systems."[25] Additional types of tactical nuclear weapons are reported in the Russian press including nuclear artillery.[26]

Russian press reports of Russian development of precision low-yield nuclear warheads began in the late 1990s. In 1999, Russia's First Deputy Atomic Energy Minister Viktor Mikhailov said: "a 'new generation' of low-yield nuclear weapons 'can really be used in case of any large-scale military conflict." [27] A declassified CIA report from August 2000 stated, "Senior Russian military officers have advocated the use of highly accurate, super-low yield nuclear weapons in Russian military journals such as Military Thought and Armeyskiy Shornik."[28] It said, "Judging from Russian writing since 1995 and Moscow's evolving nuclear doctrine, new roles are emerging for very-low-yield nuclear weapons—including weapons with tailored radiation output...."[29] The report also noted, "Moscow's military doctrine on the use of nuclear weapons has been evolving and probably has served as the justification for the development of very low-yield, high-precision nuclear weapons. The range of applications will ultimately be determined by Russia's evolving nuclear doctrine, and could include artillery, air-to-air weapons, ABM weapons, anti-satellite weapons or multiple rocket launchers against tanks or massed troops...."[30] The 2009 report of the U.S. Strategic Commission stated, "Apparently Russia and possibly China are conducting low yield tests."[31] In the last few years, there have been reports in the Russian press, including the State media, of actual Russian deployment of precision lowyield nuclear weapons with low sub-kiloton yields, including deployment on Russian submarinelaunched ballistic missiles.[32]

Thus, Bill Gertz's report that Russia will build up to 8,000 nuclear weapons, including precision low-yield nuclear weapons by 2026, is quite plausible. Indeed, the number might be considerably higher. Russia may even be approaching 8,000 warheads today. In light of Russia's nuclear doctrine which allows the first use of nuclear weapons in conventional war, this development is quite dangerous and we are only just beginning to come to grips with this threat.

**Dr. Mark B. Schneider** is a Senior Analyst with the National Institute for Public Policy. Before his retirement from the Department of Defense Senior Executive Service, Dr. Schneider served in a number of senior positions within the Office of Secretary of Defense for Policy including Principal Director for Forces Policy, Principal Director for Strategic Defense, Space and

Verification Policy, Director for Strategic Arms Control Policy and Representative of the Secretary of Defense to the Nuclear Arms Control Implementation Commissions. He also served in the senior Foreign Service as a Member of the State Department Policy Planning Staff.

## **Notes:**

- [1] Bill Gertz, "Russia Sharply Expanding Nuclear Arsenal, Upgrading Underground Facilities," *Washington Free Beacon*, December 13, 2017, available at http://freebeacon.com/national-security/russia-sharply-expanding-nuclear-arsenal-upgrading-underground-facilities/.
- [2] Houston T. Hawkins, "RETHINKING THE UNTHINKABLE," Los Alamos National Laboratory National Security Science, December 14, 2014, p. 15, available at https://www.lanl.gov/discover/publications/national-security-science/2014-december/\_assets/doc/NSS-december2014.pdf.
- [3] Ibid., p. 16.
- [4] Mark B. Schneider, "The Nuclear Doctrine and Forces of the Russian Federation,": (Fairfax Va.: National Institute Press, 2006), p. 14, available at http://www.nipp.org/wp-content/uploads/2014/12/Russian-nuclear-doctrine-NSF-for-print.pdf.
- [5] For a list of these systems see Mark B. Schneider, "Russian Nuclear Weapons Policy," *Real Clear Defense*, April 28, 2017, available
- at <a href="http://www.realcleardefense.com/articles/2017/04/28/russian\_nuclear\_weapons\_policy\_">http://www.realcleardefense.com/articles/2017/04/28/russian\_nuclear\_weapons\_policy\_</a>
- <u>111261.html</u>. The only announced changes from the date of this publication are that Russia has put the rail-mobile ICBM program on hold and it has announced a new strategic submarine, the Borey B.
- [6] "Formidable Sarmat: Satan's successor that can piece any defense," *TASS*, October 25, 2016, available at http://tass.com/defense/908575.
- [7] Pavel Podvig, "Liner SLBM explained," *Russian Force.org*, October 11, 2011, available at <a href="http://russianforces">http://russianforces</a>. org/blog/2011/10/liner\_slbm\_explained.shtml.
- [8] "Russian Navy takes into service Layner ICBM," *BBC Monitoring*, April 2, 2014, available at https://dialog.proquest.com/professional/docview/1511968598?accountid=155509.: U.S. Department of State, "Russian Federation MOU Data," U.S. Department of State, January 1, 2007, available at <a href="http://20012009.state.gov/">http://20012009.state.gov/</a> documents/organization/83235.pdf.; Charles P. Vick, "A Highly Modified Topol-M/SS-27," *Globalsecurity.org*, October 10,2013, available at <a href="http://www.global security.org/wmd/world/russia/rs-24.htm.;" "Nuke trains">http://www.global security.org/wmd/world/russia/rs-24.htm.; "Nuke trains" with up to 30 Yars missiles rolling out from 2018 Russian defense source," *RT*, December 26, 2014, available at <a href="https://www.rt.com/news/217795-russia-nuclear-missile-trains/">https://www.rt.com/news/217795-russia-nuclear-missile-trains/</a>.; "New START: Potemkin Village Verification," The New START Working Group, The Heritage Foundation, June 24, 2010, p. 7, available at <a href="http://www.heritage.org/">http://www.heritage.org/</a> research/reports/2010/06/new-start-potemkin-village-verification.
- [9] Pavel Podvig, "Bulava has six warheads," *Russian Forces.org*, April 3, 2006, available at <a href="http://russianforces.org/">http://russianforces.org/</a> blog/ 2006/04/ bulava\_has\_six\_warheads.shtml.: Pavel Podvig, "Jane's Cover Story," *Russian Forces.org*, July 9, 2007, available at: <a href="http://russianforces.org/blog/2007/07/janes\_cover\_story.shtml">http://russianforces.org/blog/2007/07/janes\_cover\_story.shtml</a>; "SS-N-32 'Bulava'," *Missile Threat.Com*, August 10, 2016, available at <a href="https://missilethreat.csis.org/missile/ss-n-32-bulava/">https://missilethreat.csis.org/missile/ss-n-32-bulava/</a>; "Yars Intercontinental ballistic missile," *Military Today.com*, no date, available at <a href="http://www.military-today">http://www.military-today</a>. "Russia: Comparison of Sineva, Bulava ICBMs, possible reason

- for Bulava's failures," <u>BBC Monitoring Former Soviet Union</u>, July 20, 2009, available at <a href="https://dialog.proquest.com/professional/docview/1511968598?accountid=155509">https://dialog.proquest.com/professional/docview/1511968598?accountid=155509</a>.
- [10] "Russia's Strategic Missile Forces as its decisive defense," *TASS*, December 19, 2017, available at http://tass. com/defense/981811.: U.S. Department of State, "Fact Sheets: New START Treaty Aggregate Numbers of Strategic Offensive Arms," U.S. Department of State, October 2, 2017, available at https://www.state.gov/t/avc/newstart/ 274550.htm.
- [11] James R. Howe, "Exploring the Dichotomy Between New START Treaty Obligations and Russian Actions and Rhetoric," Vision Centric, Inc., October 2015, slide 4.
- [12] "Russia Strategic Missile Forces Launch Command-staff Exercise," <u>ITAR-TASS</u>, March 10, 2010. No longer posted on the *TASS* web site.
- [13] Pavel Podvig, "Sarmat Tests to Begin in 2015," *Russianforces.org*, January 26, 2015, available at http://russian forces.org/blog/ 2015/01/sarmat\_tests\_to\_begin\_in\_2015.shtml.
- [14] Gertz, "Russia Sharply Expanding Nuclear Arsenal, Upgrading Underground Facilities," op. cit.
- [15] Mark B. Schneider, *New START: The Anatomy of a Failed Negotiation*, (Fairfax Virginia: National Institute Press, July 2012), p. iii, available at http://www.nipp.org/wp-content/uploads/2014/12/New-start.pdf.
- [16] "In the coming years, the ASF will receive the latest PAK FA fighters and Tu-160M2 strategic missile carriers," Defense Ministry of the Russian Federation, June 19, 2017, available at <a href="http://eng.mil.ru/en/news\_page/country/more.htm?id=12129460@egNews.">http://eng.mil.ru/en/news\_page/country/more.htm?id=12129460@egNews.</a>: "Russian Defense Ministry Says Eyeing "Purchase of 50 Modernized Tu-160 Bombers," *Sputnik News*, July 18, 2017, available at <a href="https://sputniknews.com/military/201707181">https://sputniknews.com/military/201707181</a> 5565 8243-russia-tu160-bombers-purchase/.
- [17] "Russian Navy to receive improved Borei-class strategic submarine in 2026 source," *TASS*, December 25, 2016 available at <a href="http://tass.com/defense/982864">http://tass.com/defense/982864</a>.: "This is When Construction of Russian 5th-Gen Nuclear Sub is Expected to Start," *Sputnik News*, July 28, 2017, available at <a href="https://sputniknews.com/military/20170728105">https://sputniknews.com/military/20170728105</a> 5958464-russia-fifth-generation-nuclear-submarine/.; "Russia's next-gen strategic stealth bomber may be unveiled in 2018," *Russia Today*, October 14, 2016, available at <a href="https://www.rt.com/news/362724-russian-next-gen-strategic-bomber/">https://www.rt.com/news/362724-russian-next-gen-strategic-bomber/</a>.
- [18] "Obama Advisor Gary Samore, 'The Ball is Very Much in Tehran's Court'," *Radio Free Europe*, April 14, 2011, available at
- http://www.rferl.org/content/interviewsamore\_russia\_iran\_us\_policy/3557326.html.
- [19] "James N. Miller, Principal Deputy Under Secretary of Defense for Policy, Statement before the House Commit-tee on Armed Services, November 2, 2011," available at <a href="http://armedservices.house.gov/index">http://armedservices.house.gov/index</a>. cfm/files/serve?File\_id=faad05df-9016-42c5-86bc-b83144c635c9..
- [20] "Russia not advising U.S. to raise issue of intermediate, short-range missiles at NPT conference," *Interfax*, April 17, 2015, available at
- http://search.proquest.com/professional/docview/1673958229?accountid=155509.
- [21] "Senior Diplomat Says Russia Abides By Nonproliferation Commitments," *ITAR-TASS*, May 3, 2005, available at
- http://www.partnershipforglobalsecurity.org/Projects%t20and%20Publications/News/Nuclear%20News/2005/552005 111653AM.html#1D.
- [22] Graham Allison, "WHAT HAPPENED TO THE SOVIET SUPERPOWER'S NUCLEAR ARSENAL? CLUES FOR THE NUCLEAR SECURITY SUMMIT," (Cambridge Mass.:

Harvard Belfer Center for Science and International Affairs, March 2012), p. 12, available at <a href="https://www.belfercenter.org/sites/default/files/files/publication/3%2014%">https://www.belfercenter.org/sites/default/files/files/publication/3%2014%</a>

2012%20Final%20What%20Happened%20to%20Soviet%20Arsenals.pdf.: Alexei Arbatov, "Deep Cuts and De-alerting: A Russian Perspective," in Harold Feiveson, ed., *The Nuclear Turning Point: A Blueprint for Deep Cuts and De-Alerting of Nuclear Weapons*, (Washington, DC.: Brookings Institution, 1999), p. 320.

- [23] Dmitriy Sudakov, "Russia prepares nuclear surprise for NATO," *Pravda.ru*, November 12, 2014, available at http://www.pravdareport.com/russia/politics/12-11-2014/129015-russia\_nato\_nuclear\_surprise-0/.
- [24] Aleksey Arbatov, "Look Before You Leap," *Nezavisimoye Voyennoye Obozreniye Online*, August 7, 2013. (Translation by World News Connection.)
- [25] U.S. Defense Intelligence Agency, *Russia Military Power: Building a Military to Support Great Power Aspirations*, (Washington D.C.: Defense Intelligence Agency, 2017), p. 31, available at http://www.dia.mil/ Portals/27/ Documents/

 $News/Military\%\,20 Power\%\,20. Publications/Russia\%\,20 Military\%\,20 Power\%\,20 Report\%\,202017. p.\,df.$ 

- [26] "Russia's Severodvinsk attack sub to be armed with new cruise missiles," *ITAR-TASS*, March 27, 2009. (Translated by World News Connection).: "Академик Евгений Николаевич Аврорин: «Наука это то, что можно сделать, а техническая наука это то, что нужно сделать»," *atomic-energy.ru*, April 10, 2013, available at <a href="http://www.atomic-energy.ru/interviews/2013/04/10/41068">http://www.atomic-energy.ru/interviews/2013/04/10/41068</a>. (In Russian).
- [27] "Russia's citadel of secrecy: Arzamas-16, birthplace of the Soviet Union's atomic bomb, still centre of nuclear activity: [Final Edition]," *Calgary Herald*, September 5, 1999, available at https://dialog.proquest.com/professional/ docview/244759414?accountid=155509.
- [28] "Evidence of Russian Development of New Subkiloton Nuclear Warheads [Redacted]," Intelligence Memorandum, Central Intelligence Agency, August 30, 2000, approved for release October 2005, pp. 6, 10, available at

http://www.foia.cia.gov/sites/default/files/document\_conversions/89801/DOC\_0001260463.pdf. [29] Ibid.

[30] Ibid.

[31] William J. Perry and James R. Schlesinger, *America's Strategic Posture - The Final Report of the Congressional Commission on the Strategic Posture of the United States*, (Washington D.C.: U.S. Institute of Peace, 2009), p. 83, available at http://media.usip.org/reports/strat\_posture\_report.pdf.

[32] Ilya Kramnik, "Nevsky and Novomoskovsk: Two Submarines for Putin," *Sputnik News*, December 12, 2010, available at http://sputniknews.com/analysis/20101215/161784522.htmlz; Andrey Kislyakov, "Does Russia Need a 'Wet' Missile and One More Tank?," *Ria Novosti*, January 19, 2008. (Translated by World News Connection).; "Russian pundit Litovkin argues case of Bulava," *Ekho Moskvy Radio*, July 17, 2009. (Translated by World News Connection.)