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# The INF Treaty and New START: Decades of Russian Deceit and U.S. Credulity

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NATIONAL INSTITUTE FOR PUBLIC POLICY

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and U.S. Credulity**

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## Preface

This *Occasional Paper* represents a compilation of National Institute for Public Policy (NIPP) *Information Series* publications by this author dating between 2014 and 2026 concerning the problem of Russian noncompliance with the INF and the New START Treaties and its implication for growing Russian nuclear capability and U.S. national security. To put this publication in perspective, the reader might consult the 2012 NIPP monograph by this author entitled *New START: The Anatomy of a Failed Negotiation*. It deals with the substantive and verification problems with the New START Treaty and the history of Soviet arms control violations.

“What is Past is Prologue” is inscribed on the National Archives Building in Washington, D.C. Unfortunately, this applies to the impact of arms control on the Russian nuclear threat. Russian violation of the INF Treaty led to its termination by the first Trump Administration. Despite Russian violations of the New START Treaty and Russia’s illegal “suspension” of the entire Treaty in 2023, the United States continued to observe the Treaty’s substantive limits until it expired in February 2026. Indeed, this appears to be continuing.

While the Department of State generally publishes an annual report on arms control compliance, even the best of these represents only a snapshot in time. Some previous administrations ignored the legal requirement to produce these reports or provided very little information in the unclassified versions.

The 2023 report of the bipartisan Congressional Strategic Posture Commission concluded that, “Over the past 20 years, Russia has either violated or has failed to comply with nearly every major arms control treaty or agreement to which the United States is or was a party.” In 2024, the Biden Administration acknowledged that China,

Russia and North Korea “...are all expanding and diversifying their nuclear arsenals at a breakneck pace—showing little or no interest in arms control.”

In 2026, after President Trump ordered the resumption of U.S. nuclear testing in response to covert nuclear tests by Russia and China, the Department of State revealed that China had been testing nuclear weapons at hundreds of tons yield and that Russia had likely exceeded the New START’s central limits more than once over the last few years. The number of Russian deployed nuclear weapons could be much higher than is generally reported in the Western press if Russia took advantage of the lack of New START Treaty inspections since March 2020 to upload its nuclear forces. Russia may have thousands more nuclear weapons than most Western estimates acknowledge. Even existing Chinese nuclear forces have the potential to carry many more weapons than accorded to them. China’s nuclear-capable missile forces will be substantially expanded over the next decade. This will create, particularly in combination with Russia, an unprecedented deterrence problem.

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## Confirmation of Russian Violation and Circumvention of the INF Treaty\*

The former Soviet Union, and its main successor state the Russian Federation, have had a very bad record of compliance with arms control agreements. In a December 1985 unclassified report, President Ronald Reagan summed up the existing compliance situation: "...the Soviet Union has violated its legal commitments to the Strategic Arms Limitation Treaty-1 Anti-Ballistic Missile (SALT I ABM) Treaty, and Interim Agreement, the SALT II Agreement, the Limited Test Ban Treaty of 1963, the Biological and Toxin Weapons Convention, the Geneva Protocol on Chemical Weapons, and the Helsinki Final Act. In addition, the U.S.S.R. has likely violated provisions of the Threshold Test Ban Treaty."<sup>1</sup> Subsequent State Department reports record Russian violations of the INF Treaty and the START Treaty.<sup>2</sup>

Soviet and later Russian violations of arms control commitments have been numerous and consistent throughout the last forty years. It does not matter whether the commitments are politically or legally binding. Indeed, the Soviets and Russians have repeatedly demonstrated disregard for commitments that prevent them from achieving their objectives with regard to their nuclear capability.<sup>3</sup> Under Vladimir Putin, the Russian compliance

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\* Original publication: Mark B. Schneider, "Confirmation of Russian Violation and Circumvention of the INF Treaty," *Information Series*, No. 360 (Fairfax, VA: National Institute Press, February 2014).

<sup>1</sup> *Soviet Noncompliance with Arm Control Agreements, Special Report 136* (Washington, D.C.: U.S. Department of State, December 1985), p. 2.

<sup>2</sup> For more detail on the overall record of Soviet and Russian arms control violations see Mark B. Schneider, "Russian Violations of Its Arms Control Obligations," *Comparative Strategy*, September 2012, available at <http://www.tandfonline.com/doi/abs/10.1080/01495933.2012.711115?journalCode=ucst20#preview>.

<sup>3</sup> *Ibid.*

record appears to have gotten considerably worse. This is largely being ignored by the Obama Administration, despite pressure from Congress to do something about it.

The 1987 INF Treaty completely eliminated the entire class of ground-launched ballistic and cruise missiles with a range between 500 and 5,500-km. All existing missiles in this range class were eliminated by 1991 and the Treaty provided that the parties shall “not have such systems thereafter.”<sup>4</sup> Specifically, the parties may not “produce or flight-test any intermediate-range missiles or produce any stages of such missiles or any launchers of such missiles.”<sup>5</sup>

There were early minor violations of the INF Treaty by the Soviet Union. Subsequently, there was a much more serious violation of the INF Treaty verification regime by the Russian Federation. The Clinton Administration’s 1995 arms control compliance report stated, “On December 25, 1993, Russia exited what it declared to be a training model of the RS-12M Variant 2 ICBM for silo launcher (U.S. designation—SS-X-27 ICBM) from the Votkinsk Machine Building Plant, but refused to allow U.S. inspectors to use the full-range of existing INF inspection procedures for the missile.”<sup>6</sup> Another State Department report stated, “The United States concluded that these exits failed to comply with several provisions of the INF Treaty.”<sup>7</sup> Until this issue was resolved, missiles exiting Votkinsk were subject to a “policy arrangement” which did not entail full implementation of U.S. Treaty rights.<sup>8</sup> The ultimate

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<sup>4</sup> The INF Treaty, Article 1, available at <http://www.acq.osd.mil/tc/treaties/inf/text.htm#preamble>.

<sup>5</sup> *Ibid.*, Article VI, paragraph 1.

<sup>6</sup> “Adherence To and Compliance With Arms Control Agreements,” (Washington, D.C.: U.S. Department of State, 1996), available at <http://www.state.gov/www/global/arms/reports/annual/comp.html>.

<sup>7</sup> *Adherence to and Compliance with Arms Control Agreements, 1995* (Washington, DC: The U.S. Arms Control and Disarmament Agency, May 30, 1995), p. 7.

<sup>8</sup> “Adherence To and Compliance With Arms Control Agreements.” 1996, op. cit.

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resolution involved changing the Treaty right to “image the content of the canister” to “selective imaging.”<sup>9</sup> This was a *de facto* Treaty amendment without the advice and consent of the Senate.

More recent and much more serious issues related to Russian compliance with the INF Treaty were outlined in a 2012 letter from Congressman Michael Turner (R-OH) to then-Secretary of State of Hillary Clinton, then-Secretary of Defense Leon Panetta and General (ret.) James R. Clapper, Director of National Intelligence. Congressman Turner received a response from Under Secretary of Defense James R. Miller which mainly did not deal with the issues he had raised.<sup>10</sup> Secretary Miller promised additional information in the next State Department compliance report. That did not happen. The next unclassified Obama Administration’s August 2012 report on *Adherence to and Compliance with Arms Control, Nonproliferation, and Disarmament Agreements and Commitments* said nothing about the issues raised by Congressman Turner.

On January 29, 2014, the *New York Times* reported, “The United States informed its NATO allies this month that Russia had tested a new ground-launched cruise missile, raising concerns about Moscow’s compliance with a landmark arms control accord.”<sup>11</sup> The article goes on to say that beginning in May of 2013 the Obama Administration

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<sup>9</sup> Mark B. Schneider, *New START: The Anatomy of a Failed Negotiation* (Fairfax, VA: The National Institute Press, 2012), p. 61, available at <http://www.nipp.org/Publication/Downloads/Downloads%202012/New%20START%20Final%20for%20web.pdf>.

<sup>10</sup> DUSD James Miller, Letter to the Honorable Michael R. Turner Chairman Subcommittee on Strategic Forces Committee on Armed Services U.S. House of Representatives, August 3, 2012, p.2.

<sup>11</sup> Michael Gordon, “U.S. Says Russia Tested Missile, Despite Treaty,” *The New York Times*, January 29, 2014, available at <http://www.nytimes.com/2014/01/30/world/europe/us-says-russia-tested-missile-despite-treaty.html>.

raised this matter with senior Russian officials to no avail.<sup>12</sup> *The New York Times* also indicated that unnamed administration officials said “there was no question the missile tests ran counter to the treaty.”<sup>13</sup> On January 30th, the State Department press spokesman confirmed the story stating: “we have raised this issue with the Russians. That is true. I can certainly confirm that...I don’t have anything to...refute the facts in the report.”<sup>14</sup>

On January 30, 2014 Congressman and Subcommittee Chairman on the House Armed Services Committee Michael Turner characterized the Russian actions as a “material breach” of the INF Treaty.<sup>15</sup> On February 6, 2014, House Armed Services Committee Chairman Howard P. “Buck” McKeon (R-CA), Chairman of the House Foreign Relations Committee Ed Royce (R-CA), and Chairman of the House Select Committee on Intelligence Mike Rogers (R-MI) sent a letter to the President asking him to take action against Russia’s “material breach” of the INF Treaty, stating that there was “compelling evidence pointing to Russia’s material breach and circumvention of the Intermediate-Range Nuclear Forces (INF) Treaty.”<sup>16</sup> The House Armed Services Committee also confirmed that earlier Congressional letters on Russian violation and

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<sup>12</sup> Ibid.

<sup>13</sup> Ibid.

<sup>14</sup> Jen Psaki Spokesperson, Daily Press Briefing (Washington, DC: U.S. Department of State, January 30, 2014), available at <http://www.state.gov/r/pa/prs/dpb/2014/01/221045.htm>.

<sup>15</sup> Congressman Michael Turner, Letter to President Barack Obama, January 30, 2014, available at [http://armedservices.house.gov/index.cfm/files/serve?File\\_id=38D4A0C7-351C-43C7-87A5-1F2FD8F5E5A1](http://armedservices.house.gov/index.cfm/files/serve?File_id=38D4A0C7-351C-43C7-87A5-1F2FD8F5E5A1).

<sup>16</sup> McKeon, Royce, Rogers Letter to President - February 2014, available at [http://armedservices.house.gov/index.cfm/files/serve?File\\_id=0D908BDC-EC41-4C14-A0C6-59BDB2DF4343](http://armedservices.house.gov/index.cfm/files/serve?File_id=0D908BDC-EC41-4C14-A0C6-59BDB2DF4343).

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circumvention of arms control treaties related to the INF compliance issue.<sup>17</sup>

There are actually five issues involving Russian violation or circumvention of the INF Treaty. (A violation is an action that is specifically prohibited by some provision of the INF Treaty. The term “circumvention” is used here to mean that Russia has tested or deployed a ground-launched ballistic or cruise missile designed to achieve capability prohibited by the INF Treaty by exploiting loopholes in the INF and New START Treaties.) These issues include: 1) the cruise missile that had recently been given much well deserved press attention; 2) the range of the Iskander M ballistic missile; 3) the covert retention of the Skorost IRBM; 4) the RS-26/Rubezh ballistic missile that appears to be a replacement for the Soviet SS-20 IRBM that was eliminated by the INF Treaty; and 5) the reported nuclear surface attack capability of Russian ABM interceptor missiles and surface-to-air missiles (SAMs).

Russia has repeatedly threatened to withdraw from the INF Treaty. This issue was first raised in 2007 by then-Defense Minister Sergei Ivanov (now Kremlin Chief of Staff) who called the Treaty a “mistake” and a “Cold War relic.”<sup>18</sup> Then-Chief of the General Staff General Yuriy Baluyevskiy threatened to pull out of the treaty unless Washington decreased its missile defense plans. He said, “It is possible for a party to abandon the treaty [unilaterally] if it provides convincing evidence that it is necessary to do so,” and

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<sup>17</sup> “The Nuclear Treaty Russia Won’t Stop Violating,” House Armed Services Committee, February 12, 2013, available at [http://armedservices.house.gov/index.cfm/defense-drumbeat-blog?ContentRecord\\_id=F83A1F20-7069-418B-A4DC-0ED9F751F689](http://armedservices.house.gov/index.cfm/defense-drumbeat-blog?ContentRecord_id=F83A1F20-7069-418B-A4DC-0ED9F751F689).

<sup>18</sup> Stephen J. Blank, *Towards A New Russia Policy* (Carlisle, PA: U.S. Army Strategic Studies Institute, February 2008), p. 44, available at <http://www.scribd.com/doc/4871316/TOWARDS-A-NEW-RUSSIA-POLICY>.: Jane M.O. Sharp, “Russia and America: Is Another Arms Race Afoot?,” MIT, November 7, 2007, available at [http://web.mit.edu/cis/editorspick\\_sharp07\\_audit.html](http://web.mit.edu/cis/editorspick_sharp07_audit.html).: “Soviet-U.S. INF Treaty A Relic Of Cold War - Ivanov (Part 2),” *Interfax*, May 23, 2007, available at <http://wnc.dialog.com/>.

added that, “We have such evidence at present.”<sup>19</sup> President Putin has also threatened to withdraw from the INF Treaty.<sup>20</sup>

In February 2007, then-Commander of the Strategic Missile Forces, Colonel General Nikolai Solovtsov said, “If the political decision is made to withdraw from this treaty (the Russian-American Intermediate Range Nuclear Forces Treaty, or INF) the Russian Strategic Missile Forces will be ready to fulfill this task.”<sup>21</sup> That same year, Russian Major General Midykhat Vildanov, a professor at the Academy of Military Sciences, called for “pragmatic approaches” to the observance of the INF Treaty in support of Russia’s national security.<sup>22</sup> Major General Vladimir Vasilenko, head of the 4<sup>th</sup> Central Research and Development Institute of the Russian Defense Ministry stated: “Deploying ground-based medium-range missiles may be one of the options for insuring national security.”<sup>23</sup> In June 2013, Kremlin Chief of Staff Sergei Ivanov stated that Russian observance of the INF Treaty “can’t last endlessly.”<sup>24</sup>

Instead of withdrawing from the INF Treaty, which would have exposed Russia to significant international criticism and open the door to U.S. development and deployment of INF-range missiles, Russia appears to be

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<sup>19</sup> “Russia may unilaterally quit INF Treaty - General Staff,” *Ria Novosti*, February 2, 2007, available at <http://en.rian.ru/russia/20070215/60795303.html>

<sup>20</sup> “Putin threatens withdrawal from cold war nuclear treaty,” *The Guardian*, October 12, 2007, available at <http://www.guardian.co.uk/world/2007/oct/12/russia.usa1>.

<sup>21</sup> “Medium-range Missiles Could Re-appear In Strategic Missile Forces’ Arsenal,” *Agentstvo Voyennykh Novostey (Internet Version-VVVV)*, February 19, 2007, available at <http://www.wnc.dialog.com/>.

<sup>22</sup> Schneider, “Russian Violations of Its Arms Control Obligations,” op. cit., p. 341.

<sup>23</sup> “Expert: Russia Could Counter Security Threats By Employing Medium-Range Missiles,” *Agentstvo Voyennykh Novostey*, February 14, 2006, available at [www.http://www.wnc.dialog.com/](http://www.wnc.dialog.com/).

<sup>24</sup> “Russia honoring INF treaty, but this can’t last endlessly - Kremlin chief of staff,” *Interfax*, June 24, 2013, available at <http://www.wnc.dialog.com>.

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creating the same type of capability that existed before the INF Treaty by a combination of circumventions and Treaty violation where this is necessary.

## **The Cruise Missile Issue**

There is considerable unclassified information to support *The New York Times* story and the assessment of the Congressional leaders that Russia is in violation of the INF Treaty. The cruise missile in question is almost certainly the R-500.<sup>25</sup> The evidence includes numerous Russian press reports concerning the range of the R-500, photographs of the R-500 launcher and its launch canister, and photographs of the first R-500 launch which were released by the Russian Defense Ministry.<sup>26</sup> These appear to show a missile that is too large to be a short-range cruise missile. Moreover, what is the purpose of a subsonic cruise missile on a system that already has a high speed ballistic (or probably, more accurately, semi-ballistic) missile? The only significant advantage, *consistent with the INF Treaty*, would be more missiles on the launcher. However, the Iskander-M semi-ballistic missile would clearly have a much shorter time to target and much better defense penetration capability. The Iskander has been described as having a peak velocity that is hypersonic and impacting at supersonic speeds.<sup>27</sup>

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<sup>25</sup> Frank Gaffney, "While Obama Resets, Putin Rearms," *Canada Free Press*, February 3, 2014, available at <http://canadafreepress.com/index.php/article/60902>.

<sup>26</sup> "Искандер-К," August 2, 2008, available at <http://militaryrussia.ru/blog/topic-304.html>.

<sup>27</sup> "Iskander Tactical Ballistic Missile System, Russian Federation," *Army Technology.com*, no date, available at <http://www.army-technology.com/projects/iksander-system/>; "Shourya and Agni-I: What's the Difference?," vijainder.sawfnews.com, April 18, 2012, available at <http://vijainder.sawfnews.com/Articles/68580.aspx>; "Iskander-K launching a cruise missile," *Defense Talk*, December 3, 2011, available at <http://www.defencetalk.com/pictures/iskander/p46588-iskander-k-launching-a-cruise-missile.html>.

According to a report in *Vozdushno-Kosmicheskaya Oborona Online*, "Missile speed after the boost phase is 2,100 m/sec" and, "The missile maneuvers intensively with g-forces on the order of 20-30 in the boost and terminal phases of flight."<sup>28</sup> The Russians have said the speed for the R-500 is about 250m/second.<sup>29</sup> The biggest potential advantage, *inconsistent with the INF Treaty*, of adding a subsonic cruise missile like the R-500 to the Iskander system is potentially a far longer range than is possible for the Iskander M.

The first test of the R-500 in 2007 was announced by then-First Deputy Prime Minister Colonel General Sergei Ivanov.<sup>30</sup> Mr. Ivanov said, "It can be used at long range with surgical precision, as doctors say."<sup>31</sup> (Emphasis added). This is a very odd thing to say about a missile that is supposed to be short-range, but it matches the higher range numbers for the missile that have been reported in the Russian press. Many Russian press reports say that the missile has a range of two to six times the 500-km range that is allowed under the INF Treaty for short-range missiles.

After Mr. Ivanov's announcement, Russian officials generally went silent about the new missile, which is unusual. Indeed, while President Putin gave the developers of the R-500 missile the Russia State Award, their names were not mentioned "because their identity is a state

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<sup>28</sup> "Limited and Realistic in Resources: That Is How the Russian Response to Deployment of the US Missile Defense System in Europe Looks," *Vozdushno-Kosmicheskaya Oborona Online*, February 13, 2012, available at <http://www.wnc.dialog.com/>.

<sup>29</sup> Nikolai Sokov, "Russia Tests a New Ground-Launched Cruise Missile and a New Strategic Missile on the Same Day," *CNS*, June 1, 2007 available at <http://cns.miis.edu/stories/070601.htm>.

<sup>30</sup> Alexander Timoshik, "New Russian missile R-500 to destroy any US defense system," *Pravda.ru*, May 30, 2007, available at [http://english.pravda.ru/russia/kremlin/30-05-2007/92443-missile\\_r\\_500-0/](http://english.pravda.ru/russia/kremlin/30-05-2007/92443-missile_r_500-0/).

<sup>31</sup> "Putin: U.S. Pursuing 'Imperialist' Policy," *The Associated Press*, February 11, 2009, available at [http://www.cbsnews.com/8301-202\\_162-2872235.html](http://www.cbsnews.com/8301-202_162-2872235.html).

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secret.”<sup>32</sup> Again, this is very unusual. It seems clear that the Russian Government does not want the press talking to the missile’s designers. This is what one would expect if there is an issue of compliance with the INF Treaty. After the first flight test, specific R-500 flight tests were not announced. By Russian standards, there was very little bragging about the R-500, which again is unusual.

The Russian press soon began to report that the R-500 was a violation of the INF Treaty or published range numbers for the missile that would violate the Treaty. To violate the INF Treaty a ground-launched cruise missile (and there is no dispute that the R-500 is a ground-launched cruise missile) does not even have to fly beyond 500-km (the INF Treaty prohibition is on ground-launched cruise and ballistic missiles with a range between 500-5,500 kilometers), but merely have the range potential to do so. (Actual testing provides conclusive evidence of its potential range and *The New York Times* account suggests that it has been tested to prohibited range since 2008.) Under the INF Treaty, cruise missile range is the “maximum distance which can be covered by the missile in its standard design mode flying until fuel exhaustion, determined by projecting its flight path onto the earth’s sphere from the point of launch to the point of impact.”<sup>33</sup> This is a deliberately restrictive definition. Since cruise missiles do not normally fly to fuel exhaustion, this effectively limits the maximum operational range of a ground-launched cruise missile, if the Treaty is complied with, to under 500-km.

In November 2007, *Ria Novosti*, an official Russian Government news agency, reported: “The flight range of a

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<sup>32</sup> Steve Gutterman, “Putin celebrates Russia Day with State Prize ceremony at Kremlin,” *The Associated Press*, June 13, 2007, available at <http://www.semissourian.com/story/1216976.html>.

<sup>33</sup> “Intermediate-Range and Shorter-Range Nuclear Forces (INF) Treaty: Table of Contents,” Article VII, paragraph 4, available at <http://www.acq.osd.mil/tc/treaties/inf/index.htm>.

new cruise missile adapted for Iskander and successfully tested in May 2007 could exceed 500 km (310 miles)."<sup>34</sup> In November 2008, it revealed that the potential range of the R-500 "can exceed 2,000 kilometers..."<sup>35</sup> Russian arms control expert Viktor Myasnikov wrote that the R-500 exceeded the 500-km limit of the INF Treaty on its first test and its range could be expanded to 1,000 kilometers.<sup>36</sup> Russian journalist Oleg Vladykin stated the "R-500 cruise missile...range will presumably increase to 1000 km or more."<sup>37</sup> *Kommersant*, a major Russian publication, maintains that the range of the R-500 "can amount to 1,000 kilometers."<sup>38</sup> Sergi Balmasov, writing in *Pravda.ru*, indicated the R-500 has a range of 2,000-km.<sup>39</sup> Russian journalists Ivan Konovalov and Vladislav Litovchenko, writing in *Kommersant*, said the Iskander system can be armed with a cruise missile with "even greater" range than 500-km.<sup>40</sup> Yury Fedorov, Associate Fellow, Russia and

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<sup>34</sup> "Russia to compensate for INF losses with Iskander missile system," *Ria Novosti*, November 14, 2007, available at <http://www.en.rian.ru/russia/20071114/88066432.html>.

<sup>35</sup> Ilya Kramnik, "The Iskander: a story of a new face-off," *Ria Novosti*, November 19, 2008, available at <http://www.en.rian.ru/analysis/20081110/118218596.html>.

<sup>36</sup> Schneider, "The New START Treaty, Anatomy of a Failed Negotiation" op. cit., p. 69.

<sup>37</sup> Oleg Vladykin, "Missile With a Political Target; Topol, Bulava, and Iskander Attack Balky Partners," *Moskovskiy Novosti* July 7, 2007, available at <http://www.wnc.dialog.com/>.

<sup>38</sup> Mikhail Barabanov, "The Iskander Factor," *Kommersant*, November 9, 2008, available at [http://www.kommersant.com/p1052937/r\\_527/Iskander\\_missiles\\_to\\_counterbalance\\_American\\_AMD\\_systems/](http://www.kommersant.com/p1052937/r_527/Iskander_missiles_to_counterbalance_American_AMD_systems/).

<sup>39</sup> Sergi Balmasov, "Russia Shows Iskander Missile Systems to NATO," *Pravda.ru*, December 17, 2010, available at <http://english.pravda.ru/russia/politics/17-12-2010/116249-iskander-0>.

<sup>40</sup> Ivan Konovalov and Vladislav Litovchenko, "Generals Always Will Have Luga in Their Pocket: NATO of Course Does Not Threaten Russia, but It Is Best To Keep Iskanders Closer to It," *Kommersant Online*, March 1, 2010, available at <http://www.wnc.dialog.com>.

Eurasia Programme, Chatham House, noted "there are reports that it could have a range of up to 2000km, as it is an upgrade of the Soviet land based cruise missile RK-55, also known as CSS-X-4 Slingshot...destroyed in accordance with the INF treaty."<sup>41</sup> (The RK-55 was reported to have had a 200-kt nuclear warhead.)<sup>42</sup> Mikhail Barabanov, chief editor of the *Moscow Defense Brief*, wrote that the R-500 range could be more than 1,000-km.<sup>43</sup> Writing in *Ria Novosti* and for the *UPI*, Ilya Kramnik said that the range of the R-500, and possibly a second missile, could be between 1,200 and 3,000-km.<sup>44</sup> Kramnik concluded the R-500 was a violation of the INF Treaty.<sup>45</sup> In January 2009, he stated that "Iskander can be equipped with cruise missiles with a range of up to 2,000 km (1,243 miles), and even 3,000 km (1,865 miles) that will allow it to destroy targets anywhere in Western Europe."<sup>46</sup> In December 2013, *Interfax*, the main private Russian news agency, noted, "The R-500 missile now is being developed

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<sup>41</sup> Yury Fedorov, "American Ballistic Missile Defence, Russian Iskanders and a New Missile Crisis in Europe," London: Chatam House, May 22, 2009, available at <http://www.chathamhouse.org/sites/default/files/public/Research/Russia%20and%20Eurasia/220509summary.pdf>.

<sup>42</sup> "RK-55 (SS-N-21/SSC-X-4)," *Missile Threat.com*, April 5, 2013, available at <http://missilethreat.com/missiles/rk-55-ss-n-21ssc-x-4/> <http://missilethreat.com/missiles/rk-55-ss-n-21ssc-x-4/>.

<sup>43</sup> Mikhail Barabanov, "Bottom Line," *Moscow Kommersant Daily*, November 7, 2008, available at <http://www.wnc.dialog.com>.

<sup>44</sup> Ilya Kramnik, "Sticking An Iskander Missile Into The ABM Shield Part One," *UPI*, November 19, 2008, available at [http://www.spacewar.com/reports/Sticking\\_An\\_Iskander\\_Missile\\_Into\\_The\\_ABM\\_Shield\\_Part\\_One\\_999.html](http://www.spacewar.com/reports/Sticking_An_Iskander_Missile_Into_The_ABM_Shield_Part_One_999.html).: Ilya Kramnik "Missile bargaining: Iskanders for missile defense," *Ria Novosti*, January 29, 2009, available at <http://www.en.rian.ru/analysis/20090129/119877816.html>.

<sup>45</sup> Nat Helms, "Russia Threatens Missile Staging Over U.S. Plans," *Newsmax*, November 11, 2008, available at <http://www.newsmax.com/International/russia-missiles-threat/2008/11/11/id/326547>.

<sup>46</sup> Kramnik, "Missile bargaining: Iskanders for missile defense," op. cit.

for it [the Iskander K], and according to unconfirmed information [it] has a flight range exceeding 2,000 km.”<sup>47</sup>

In 2009, the U.K. House of Commons Defense Committee noted reports that the R-500 has a 2,000-km range.<sup>48</sup> *Pravda.ru* has said that NATO experts were concerned that the Iskander K had a range of 2,000-km.<sup>49</sup> *STRATFOR*, a private commercial intelligence service, obtained information from Russians to the effect that:

The R-500 is a more conventional version of the old Soviet 3M10 long-range cruise missile with a range of 2,600 km, which was deployed on Russian nuclear attack submarines. These older missiles were eliminated also under INF [-for now]. Testing of the R-500 will be completed by the end of 2009; it has been successful thus far. After that it would be a political decision whether to put it into service. Six missiles with the R-500s are already ready to be deployed.<sup>50</sup>

In June 2007, then-First Deputy Prime Minister Sergei Ivanov predicted that the new cruise missile would be in production in 2009.<sup>51</sup> In November 2007, Colonel General Vladimir Zaritsky, then-commander of the Russian Missile and Artillery Forces, indicated testing was going on and the

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<sup>47</sup> “Russian MoD Reaction to German Article on Photos Showing Iskander Missiles in Kaliningrad Oblast,” *Interfax.ru*, December 16, 2013, available at <http://www.dialog.com/proquestdialog/>.

<sup>48</sup> “Russia: a new confrontation?,” London, House of Commons Defense Committee, June 2009, available at <http://www.publications.parliament.uk/pa/cm200809/cmselect/cmdfence/276/276.pdf>.

<sup>49</sup> Balmasov, “Russia shows Iskander Missile Systems to NATO,” op. cit.

<sup>50</sup> Lauren Goodrich, “Subject INSIGHT - RUSSIA - Iskander Missile,” *Rusrep.ru*, December 13, 2009, available at <http://www.rusrep.ru/article/2012/02/27/1739377>.

<sup>51</sup> “Putin To Congratulate Iskander Cruise Missile Designers,” *Agentstvo Voyennykh Novostey (Internet Version-WWW)*, June 4, 2007, available at <http://www.wnc.dialog.com/>.

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missile was going to be operational in 2009.<sup>52</sup> He said, "Cruise missiles are being tested, I am satisfied with the progress and I am certain that the task of providing enough launchers armed with cruise missiles will be coped with on time....The military-industrial commission under the Russian government has set 2009 as the deadline."<sup>53</sup> In November 2009, Russian Rocket Forces and Artillery Commander Lt. General Sergei Bogatinov said that development of an advanced cruise missile for the Iskander system was continuing.<sup>54</sup> In August 2012, *Interfax-AVN*, reported, "Cruise missiles are being serially produced for Iskander tactical missile systems."<sup>55</sup> Production of ground-launched cruise missiles of INF range is also a violation of the INF Treaty. A recent Russian press report suggests it has been deployed or very close to it. *ARMS-TASS* quotes the General Director of the MITT design bureau as saying that the "complex 'Iskander-M' is transmitted to the troops complete with cruise missiles and aeroballistic [missiles]."<sup>56</sup>

With regard to the possible second prohibited cruise missile reported by *Ria Novosti's* military correspondent Ilya Kramnik, there is much less press coverage. A Finnish study of the Iskander system suggests that Russian Club supersonic cruise missiles are also connected with it.<sup>57</sup> The

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<sup>52</sup> "Russian Army To Have Cruise Missiles-armed Iskander In 2009," *ITAR-TASS*, November 14, 2007, available at <http://www.wnc.dialog.com/>.

<sup>53</sup> *Ibid.*

<sup>54</sup> "Russia to Form First Missile Brigade Armed With Iskander Missiles in 2010," *Interfax* November 23, 2009, available at <http://www.wnc.dialog.com/>.

<sup>55</sup> "New strategic cruise missiles developed in Russia - Defense Ministry (Part 2)," *Interfax-AVN Online*, August 8, 2012, available at <http://www.wnc.dialog.com/>.

<sup>56</sup> "Russia: Engineering Design Bureau Creates A New Missile For Tactical Complex 'Iskander-M'," *ARMS-TASS*, February 10, 2014.

<sup>57</sup> Stephen Forss, "The Russian Operational Tactical Iskander Missile System," Helsinki Finland: Maanpuolustuswkorkeakoulu, 2012, p. 16, available at [http://www.doria.fi/bitstream/handle/10024/84362/StratL4\\_42w.pdf?sequence=1](http://www.doria.fi/bitstream/handle/10024/84362/StratL4_42w.pdf?sequence=1).

Russians press reports that one version of the Club missile family, the Kalibr, is nuclear capable and has a 2,500-2,600-km range.<sup>58</sup>

## Range of the Iskander M

The Iskander M (SS-26) is the poster-child of the Russian tactical nuclear modernization program. Russian leaders never stop talking about it. Indeed, in 2006, President Vladimir Putin awarded Russia's State Prize to the developers of the Iskander-M tactical missile system.<sup>59</sup>

The Iskander-M missile is nuclear capable and it was launched in Russia's 2013 large nuclear exercise.<sup>60</sup> According to the Russian Defense Ministry, "Combat units of rocket troops and ordnance of the Central and Southern Military Districts fired four Iskander and Tochka-U [SS-21] tactical missiles at training targets at Kapustin Yar firing range in Astrakhan region on October 30, 2013 in the

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<sup>58</sup> "Lead 4th generation multirole nuclear sub of Project 885 to undergo state sea trial in November," *ITAR-TASS*, September 5, 2012, available at <http://www.itar-tass.com/en/c154/511570.html>.: Aleksandr Mozgovoy, "The Nuclear Missile-Armed Mistral Dock Landing Ship and the Space-Based Aircraft Carrier," *Moscow Nezavisimoye Voyennoye Obozreniye Online*, March 28, 2012, available at <http://www.dialog.com/proquestdialog/>.: Viktor Savenkov, "Russia Is Preparing for War Against Iran or for Iran -- Otherwise Why Is the Latest Missile Ship with Russian 'Tomahawks' Being Transferred to the Caspian?," *Moscow Svobodnaya Pressa*, June 18, 2012, available at <http://www.dialog.com/proquestdialog/>.

<sup>59</sup> "State Prize Awarded To Developers Of Iskander-M Missiles - Putin," *Moscow ITAR-TASS*, June 12, 2007, available at <http://www.wnc.dialog.com/>.

<sup>60</sup> "Army Brigade To Be Equipped With Iskander Systems This Year - Commander," *ITAR-TASS*, September 29, 2009, available at <http://www.dialog.com/proquestdialog/>.: "Ground Forces Personnel Will Be Armed With Iskanders," *Moscow Nezavisimoye Voyennoye Obozreniye*, October 29, 2009, available at <http://www.dialog.com/proquestdialog/>.: "Russia: General Staff Chief Gerasimov Directs Key Personnel Video Conference on Strategic Exercise," *Ministry of Defense of the Russian Federation*, November 1, 2013, available at <http://www.dialog.com/proquestdialog/>.: "Iskander, Tochka-U tactical missiles launched in Russia's snap drill," *Interfax-AVN*, October 30, 2013, available <http://www.dialog.com/proquestdialog/>.

framework of a surprise check and exercise of nuclear deterrence forces..."<sup>61</sup> Nuclear-armed Iskander and SS-21 missiles would violate Russian commitments under the 1991-1992 Presidential Nuclear Initiatives.<sup>62</sup>

Russia has announced that it plans to deploy up to 120 Iskander M launchers each carrying two missiles.<sup>63</sup> It has threatened the forward deployment of this missile to Kaliningrad in response to U.S. missile defense deployment.<sup>64</sup> In December 2013, the German newspaper *Bild* reported that Russia had deployed the Iskander-M to Kaliningrad.<sup>65</sup> The newspaper claimed it obtained "secret satellite" images showing 10 missiles. The Russians first confirmed the story and then Putin denied it.<sup>66</sup>

Russia is now deploying the Iskander M, which reportedly has a range potential of more than the 500-km allowed by the INF Treaty. Russian military journalist

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<sup>61</sup> "Four Iskander and Tochka-U missiles fired during surprise check of troops," *Interfax-AVN*, October 29, 2013, available at <http://www.dialog.com/proquestdialog/>.

<sup>62</sup> Schneider, "Russian Violations of Its Arms Control Obligations," op. cit., p 336-338.

<sup>63</sup> Iliya Pitalev, "Russian army to receive 120 Iskander tactical missile systems," *Ria Novosti*, August 2, 2011, available at [http://en.ria.ru/military\\_news/20110802/165508090.html](http://en.ria.ru/military_news/20110802/165508090.html).

<sup>64</sup> "Medvedev Russia will deploy Iskander in Kaliningrad to neutralize U.S. missile threats," available at <http://mishasrussiablog.blogspot.com/2008/11/medvedev-russia-will-deploy-iskanders-in.html>.; "Interview with Reserve Lieutenant-General Buzhinskiy by Vladimir Solovyev," *Moscow Kommersant Online*, April 6, 2011, available at <http://www.wnc.dialog.com/>.; "Defense ministry ready to deploy Iskanders in Kaliningrad if there is political will - general," *Moscow Interfax*, February 24, 2009, available at <http://www.wnc.dialog.com/>.; "Russian defence minister explains missile deployment statement," *Interfax*, February 19, 2010, available at <http://www.wnc.dialog.com/>.

<sup>65</sup> "Moscow confirms deployment of Iskander missiles on NATO borders," *RT*, December 16, 2013 available at <http://rt.com/news/iskander-missile-deployment-russia-317/>.

<sup>66</sup> *Ibid.*: "Putin denies deployment of Iskander missiles in Kaliningrad," *CTTV.com*, December 19, 2013, available at <http://www.english.cntv.cn/20131219/105615.shtml>.

Alexander Golts has pointed out that from time to time, Russian leaders and military officials hint that the Iskander missile can fly further than 500-km.<sup>67</sup> *Izvestiya* reported that the Iskander range is 500-600-km.<sup>68</sup> A Finnish study concluded the range was 700-km.<sup>69</sup> According to Viktor Myasnikov, "Experts believe that the range of the Iskander guided missile can be increased to 1,000 kilometers without changing the launch system."<sup>70</sup> Colonel General Zaritskiy also talked about increasing the range of the Iskander.<sup>71</sup>

Myasnikov has said the missile has flown to 500-km.<sup>72</sup> This is technically a violation of the INF Treaty, but he probably did not intend to say this. The INF Treaty ballistic missile range definition is demonstrated range, different from the potential range definition which applies to cruise missiles. If the Iskander M has not flown to 500-km or above, it would be still be a circumvention of the Treaty because of its range potential. Even without testing over 500-km it could be possible to hit targets beyond the 500-km range. Loopholes in the New START Treaty open the possibility of legally testing Iskander missiles to prove it has a prohibited range. The New START Treaty does not ban air- or surface ship-launched ballistic missiles with a range of over 600-km as the START Treaty did.<sup>73</sup>

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<sup>67</sup> Schneider, *The New START Treaty, Anatomy of a Failed Negotiation*, op. cit., p. 69.

<sup>68</sup> Gennadiy Melnik and Denis Telmanov, "Iskanders Taught To Work in Formation. Russia's Main Military Argument Tested for First Time in Conditions Close to Actual," Moscow *Izvestiya Online*, September 26, 2011, available at <http://www.wnc.dialog.com/>.

<sup>69</sup> Forss, "The Russian Operational Tactical Iskander Missile System," op. cit., p. 15.

<sup>70</sup> Viktor Myasnikov, "Full Aft. Verbal Arms Race Is Under Way and Has Prospects of Becoming Real One." Moscow *Nezavisimaya Gazeta*, Nov 21, 2007, available at <http://www.wnc.dialog.com/>.

<sup>71</sup> Ibid.

<sup>72</sup> Ibid.

<sup>73</sup> Schneider, *New START: The Anatomy of a Failed Negotiation*, op. cit., pp. 5-7.

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Valeriy Kashin, head of the MITT missile design bureau which makes the Iskander-M, has revealed that there are “two new missiles for the Iskander-M operational tactical missile system.”<sup>74</sup> He did not provide any information about these missiles. He also said that Iskander missiles “were not delivered assembled...”<sup>75</sup> It is unclear how it is possible to deliver a single stage missile unassembled. Could this mean that there is an undisclosed two stage version of this system?

Stefan Forss, a former missile specialist with the government of Finland’s Foreign Ministry and currently an adjunct professor at Finland’s National Defense University, says Russia appears to be breaking the INF Treaty, stating, “If there are no further tests [of the RS-26] to intercontinental ranges – we should, however, prepare for some *maskirovka* [deception] tests in this regard – the matter is settled....Yars M [RS-26/Rubezh] will take care of the upper end of the INF range spectrum and Iskander-M of the lower end.”<sup>76</sup>

## Retention of the Skorost IRBM

Writing in September 2011, Vladimir Kudelev noted that Russia’s Federal Space Agency published a request for proposals for “the elimination of the solid-propellant rocket engines and warheads of intercontinental ballistic missiles (ICBMs) of the Kuryer, Skorost, and Topol-M missile complexes and the Bark submarine-launched ballistic

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<sup>74</sup> “General Director of OAO ‘NPK KBM’ Valeriy Kashin: ‘Deliveries of Iskander-M to our Army have Substantially Increased’,” *Interfax-AVN Online*, April 4, 2013, available at <http://www.wwnc.dialog.com/>.

<sup>75</sup> *Ibid.*

<sup>76</sup> Bill Gertz, “Russian Defense Radar, Missiles Worry U.S. Officials,” *The Washington Free Beacon*, July 3, 2013, available at <http://freebeacon.com/russian-defense-radar-missiles-worry-u-s-officials/>.

missiles (SLBMs).<sup>77</sup> The problem, as Kudelev noted, was that the Skorost was “erroneously described as an ICBM” because it “had a maximum range of 4,000 km.” Since the missile had been flight tested in the 1980s, it should have been declared and eliminated under the INF Treaty.<sup>78</sup> Their failure to declare and eliminate Skorost missiles violated the INF Treaty. The Russian Federation did nothing to correct the Soviet violation. The issue with regard to the RS-26 Rubezh is whether or not the Russians have done exactly the same thing.

### **RS-26 Rubezh “ICBM/IRBM” Issue**

The evidence we now have suggests that the RS-26/Rubezh (“Frontier” in Russian) is either a circumvention of the INF Treaty, a violation of the INF Treaty or a violation of the New START Treaty. (A New START violation may seem strange, but the RS-26 is almost certainly a derivative of an ICBM or SLBM which potentially brings New START into the picture.) The only thing the Obama Administration has said about the missile is, “The recent test of a new type of Russian ICBM, as announced in the Russian press, was notified and conducted consistent with the requirements of the New START Treaty; it was not subject to any provisions or restrictions under the INF Treaty.”<sup>79</sup> However, the Obama Administration did not explain the basis of this conclusion.

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<sup>77</sup> Vladimir Kudelev, “The Super-Accurate Skorost and the Undetectable Kuryer. The Forgotten Unique Developments of Aleksandr Nadiradze,” Moscow Voenno-Promyshlennyy Kuryer Online, October 12, 2011, available at <http://www.dialog.com/proquestdialog/>.

<sup>78</sup> “Russia: Recommendations Made for Upgrading Strategic Nuclear Forces for Strategic Deterrence Mission,” *Nezavisimoye Voennoye Obozreniye*, September 16, 2013, available at <http://www.dialog.com/proquestdialog/>.

<sup>79</sup> DUSD James Miller, Letter to the Honorable Michael R. Turner Chairman Subcommittee on Strategic Forces Committee on Armed Services U.S. House of Representatives, op. cit. p.1.

Former Undersecretary of State John Bolton and former Assistant Secretary of State Paula DeSutter have characterized the missile that the Russians now call the RS-26/Rubezh as an “apparent violation” of the INF Treaty, saying that all three of the successful launches went to INF range.<sup>80</sup> If the first test of the RS-26/Rubezh did not go to ICBM range as the Russians claim or if it did and the second and third tests of the RS-26 which the Russians say went to INF range were not the same type of missile as in the first successful test, the missile would be a violation of the INF Treaty.

Bill Gertz, writing in *The Washington Times* and in the *The Washington Free Beacon*, stated that an intelligence community official told him, “The intelligence community believes it’s [the RS-26/Rubezh] an intermediate-range missile that [the Russians] have classified as an ICBM because it would violate the INF treaty’ if its true characteristics were known...”<sup>81</sup> He also reported, “The Air Force National Space and Missile Intelligence Center reported recently within classified channels that Russia conducted a test launch of a new intermediate-range missile disguised as an intercontinental ballistic missile.”<sup>82</sup>

In April 2013, Congressmen Howard P. “Buck” McKeon, Chairman of the House Committee on Armed Services and Mike Rogers, Chairman of the House Permanent Select Committee on Intelligence wrote the

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<sup>80</sup> John R. Bolton and Paula DeSutter, “Russian Roulette,” *Foreign Policy*, June 21, 2013, available at [http://www.foreignpolicy.com/articles/2013/06/21/russian\\_roulette\\_obama\\_nukes\\_john\\_bolton](http://www.foreignpolicy.com/articles/2013/06/21/russian_roulette_obama_nukes_john_bolton).

<sup>81</sup> Bill Gertz, “Russian aggression: Putin violating nuclear missile treaty,” *The Washington Times*, June 25, 2013, available at <http://www.washingtontimes.com/news/2013/jun/25/russia-violating-1987-nuclear-missile-treaty/?page=all#pagebreak>.

<sup>82</sup> Bill Gertz, “McKeon: State Department Ignores Major Russian Treaty Violation,” *The Washington Free Beacon*, July 15, 2013, available at <http://freebeacon.com/mckeon-state-department-ignores-major-russian-treaty-violation/>.

President noting that they twice expressed “concerns about a massive Russian violation and circumvention of an arms control obligation to the United States of great significance to this nation and to its allies.”<sup>83</sup> They also noted that Senators on the Senate Intelligence Committee had written “to senior Administration officials about this and other clear examples of Russia’s non-compliance with its arms control obligations.”<sup>84</sup> In February 2014, Congressman McKeon, Congressman Mike Rogers and Congressman Ed Royce, Chairman of the House Committee on Foreign Affairs again wrote the President pressing him to take action on the INF violations and circumventions.<sup>85</sup>

In a commentary on President Obama’s June 2013 Berlin speech advocating deeper nuclear weapons reductions, Congressman McKeon stated, “The President’s desire to negotiate a new round of arms control with the Russians, while Russia is cheating on a major existing nuclear arms control treaty, strains credulity. I have been urging the President through classified and unclassified correspondence to take seriously these violations by Russia since last year, but the President has ignored these concerns.”<sup>86</sup>

In June 2013, 24 Senators wrote Secretary of State John Kerry stating:

The first issue we will be watching closely as the Senate considers these nominations relates to Russia’s compliance with its arms control commitments to the United States. Specifically,

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<sup>83</sup> Howard P. “Buck” McKeon and Mike Rogers, Letter to the President, April 12, 2013, available at <http://free.beacon.com/wp-content/uploads/2013/06/Russia-Letter-2.pdf>.

<sup>84</sup> Ibid.

<sup>85</sup> McKeon, Royce, Rogers Letter to President - February 2014, op. cit.

<sup>86</sup> “Chairman McKeon on the President’s Berlin Remarks,” June 19, 2013, available at [http://armedservices.house.gov/index.cfm/press-releases?ContentRecord\\_id=36e9b3e7-b881-4d9e-af00-7f515cc5dba0](http://armedservices.house.gov/index.cfm/press-releases?ContentRecord_id=36e9b3e7-b881-4d9e-af00-7f515cc5dba0).

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we will seek assurances from the administration that Russia is in compliance with its nuclear arms control agreements and obligations, including the Intermediate-range Nuclear Forces treaty, the Presidential Nuclear Initiatives (PNIs) agreed to by President George H.W. Bush and President Boris Yeltsin, and its Comprehensive Nuclear-Test Ban Treaty obligations as the United States defines those obligations. We note the recent amendment adopted by the House Armed Services Committee which states that Russia is 'in active noncompliance with existing nuclear arms obligations.'

Earlier this year, all Republican members of the SSCI [Senate Select Committee on Intelligence] sent you a classified letter on these very issues. The fact that the response did not address many of the issues raised in the letter, combined with the fact that the annual compliance report is already several months past-due calls into question just how seriously the administration takes the issue of verification and enforcement of existing agreements. We agree with President Obama's statement that "[r]ules must be binding. Violations must be punished. Words must mean something" and look forward to receiving additional information from you that this is the case when it comes to Russia's track record on its multilateral and bilateral arms control commitments.<sup>87</sup>

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<sup>87</sup> "Republican Senators To Secretary Kerry: Nuclear Arsenal Should Only Be Reduced With Senate Approval," June 19, 2013, available at <http://www.rubio.senate.gov/public/index.cfm/press-releases?ID=899a0c36-d0dc-49ba-9c59-435b92128f8a>.

The following discussion of the RS-26/Rubezh issues is based mainly on Russian open sources since the Obama Administration has said little about it. In May 2012, the Russian Defense Ministry announced the successful launch of a “new type” of ICBM, the second new ICBM announced since the ratification of the New START Treaty in December 2010. The Russian Defense Ministry was unusually tight-lipped about this launch, not even revealing the name or designator of the new missile. It stated only that this “new type” of mobile ICBM made maximum use of existing components.<sup>88</sup> Russian press reports were contradictory, ranging from reports that the new missile was a Bulava 30 SLBM derivative to reports it was a modified SS-27 Mod 2 (RS-24/YARS) or even a larger version of the SS-27. Note that all these reports say the missile is a derivative of an ICBM or SLBM which brings New START into play.

The unusual Russian secrecy about this new missile raised concerns that Russian silence relates to a treaty compliance issue. When a compliance issue is involved, Russia has avoided providing technical details about a new missile. An example of this is the MIRVed SS-27 (which Russia calls the RS-24 or Yars) for which there is much evidence that it violated the START Treaty because the SS-27 was declared to be a single warhead ICBM and it is not permissible to increase the number of nuclear warheads from the number originally declared.<sup>89</sup> (Since the first

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<sup>88</sup> “Russia test launches new ICBM prototype from Plesetsk cosmodrome,” *Interfax-AVN*, May 23, 2012, available at <http://www.accessmylibrary.com/article-1G1-290599158/russia-test-launches-new.html>.

<sup>89</sup> The Russian SS-27 was declared as a single warhead missile. Thus, it can’t be MIRVed. Both Russian sources and the U.S. Government say that the RS-24 or Yars is a MIRVed SS-27. See Mark Schneider, “The Future of the U.S. Nuclear Deterrent,” *Comparative Strategy*, June 2008, p. 352, available at <http://www.ingentaconnect.com/content/routledg/ucst/2008/00000027/00000004/art00005>; Pavel Podvig, “Solomonov confirms that RS-24 is MIRVed Topol-M,” September 4, 2007, available at [http://www.russianforces.org/blog/2007/09/solomonov\\_](http://www.russianforces.org/blog/2007/09/solomonov_)

launch of the RS-24 occurred on the same day as the first launch of the R-500, Russia may have violated both the INF and START Treaties on the same day.) Pavel Felgengauer has characterized it as a “rebranded” Topol M (SS-27).<sup>90</sup> In February 2014, *ITAR-TASS* called it “a modernised version of the Topol-M ICBM...”<sup>91</sup> Russia placed no information in the START Memorandum of Understanding (MOU) data exchange on the characteristics of this missile. This is in stark contrast with what they did with regard to the original version of the SS-27 and the Bulava 30 SLBM. Moreover, the START Treaty required exhibition of a new ICBM, in which the missile and its launcher are viewed, measured and photographed. This did not take place until March 2011 under New START, after the expiration of the START Treaty in December 2009.<sup>92</sup>

Had the exhibition been held under the START Treaty, the MOU information would have become unclassified

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confirms\_ that\_rs24\_i.shtml; “Russia’s missile forces to replace Topol-M with multiple-warhead RS-24,” *RIA Novosti*, November 30, 2010, available at [http://www.defenseblog-njs.blogspot.com/2010\\_11\\_01\\_archive.html](http://www.defenseblog-njs.blogspot.com/2010_11_01_archive.html); “National Security and Nuclear Weapons in the 21<sup>st</sup> Century (Washington, D.C.: Department of Energy and the Department of Defense, 2008), p. 7, available at <http://www.defense.gov/news/nuclearweaponspolicy.pdf>; Pavel Felgengauer, “Moscow Discusses the Future Development of ICBMs,” *Eurasia Daily Monitor*, January 13, 2011, available at: [http://www.jamestown.org/programs/edm/single/?tx\\_ttnews\[tt\\_news\]=37354&cHash=2df1c6d9cb](http://www.jamestown.org/programs/edm/single/?tx_ttnews[tt_news]=37354&cHash=2df1c6d9cb;); Lieutenant General Michael D. Maples, “Statement: Annual Threat Assessment,” March 10, 2009, available at <http://www.dia.mil/public-affairs/testimonies/2009-03-10.html>; Ronald L. Burgess, *World Wide Threat Assessment*, March 10, 2011, available at <http://armed-services.senate.gov/statemnt/2011/03%20March/Burgess%2003-10-11.pdf>.

<sup>90</sup> Schneider, “Russian Violations of Its Arms Control Obligations,” op. cit., p. 334.

<sup>91</sup> “Russia’s Strategic Missile Forces will get more than 130 new simulators in 2014,” *ITAR-TASS*, February 17, 2014, available at <http://en.itar-tass.com/russia/717779>.

<sup>92</sup> Ibid.: “START Aggregate Numbers of Strategic Offensive Arms,” (Washington, D.C.: U.S. Department of State, October 1, 2009), available at <http://www.state.gov/t/avc/rls/130149.htm>; “New START Treaty Implementation Update,” (Washington, D.C.: U.S. Department of State, May 17, 2012), available <http://www.state.gov/t/avc/rls/183335.htm>.

after 90 days and released to the public. This would have definitively decided the compliance issue. Under New START, information relating to the MIRVed SS-27/RS-24/Yars will never be released to the public because this is prohibited by the Treaty. Information concerning the RS-26/Rubezh will also never be released for the same reason. Russia announced that the Rubezh would go on alert in 2013 but they did not meet this deadline.<sup>93</sup>

As Russian expatriate Pavel Podvig has noted, "two of the three successful tests [of the RS-26/Rubezh] were conducted from Kapustin Yar to Sary-Shagan - far from a nominal range."<sup>94</sup> Podvig's source for this information is the Russian Defense Ministry.

In light of the short range to which the missile has been tested on two of the three successful tests, there appears to be little question that this missile is being developed mainly for peripheral attack. Tests of ICBMs to INF range are unusual for a new ICBM development program, particularly for one in which the missile will be, according to the Russian Defense Ministry, deployed after only four successful tests.<sup>95</sup> Russian Defense Ministry announcements of ICBM launches routinely include the launch point and the impact point. Russia has launched old SS-25 (Topol M) missiles from Kapustin Yar to Sary Shagan on several occasions, but the main stated purpose of most of these flights was related to missile defense and

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<sup>93</sup> "Deployment of First Regiment With New Strategic Missile Complex Will Begin in 2014 -- General Staff," *Interfax-AVN*, June 7, 2013, available at <http://www.wnc.dialog.com/>.

<sup>94</sup> Pavel Podvig, "Russia continues tests of new ICBM, named Rubezh," *Russianforces.org*, June 6, 2013, available at [http://russianforces.org/blog/2013/06/russia\\_continues\\_tests\\_of\\_new.shtml](http://russianforces.org/blog/2013/06/russia_continues_tests_of_new.shtml).

<sup>95</sup> "Putin told about successful test of new ICBM to enter service by year's end," *Rossiia 24 TV*, June 7, 2013, available at <http://www.wnc.dialog.com/>.

development of new reentry vehicles with the secondary purpose to test the reliability of the old booster.<sup>96</sup>

Launch of an ICBM to INF range does not violate the INF Treaty. For the RS-26/Rubezh to be an actual violation of the INF Treaty, the missile would have to be a “new type,” which the Russians say it is, and the first flight of this type would have to be to INF range (500-5,500-km). Commander of the Strategic Missile Forces, Colonel General Sergei Karkayev, claims that the first successful RS-26 test went over 5,600-km.<sup>97</sup> This is interesting because it means that the missile warhead could not have impacted in the normal test range in Kamchatka. It implies that the flight test was conducted not for the development of a new ICBM but rather to evade the INF Treaty by establishing an IRBM as an ICBM under New START. 5,600-km is a very short range for an ICBM, particularly in light of the Russian statement that the missile delivered only a single RV during the test.<sup>98</sup> However, the Russians say that the missile will carry multiple maneuvering hypersonic warheads.<sup>99</sup> Assuming what General Karakayev said is true (and we must remember their statements could be self-serving), it

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<sup>96</sup> Pavel Podvig, “Topol launch from Kapustin Yar,” *Russianforces.org*, December 5, 2010, available at [http://russianforces.org/blog/2010/12/topol\\_launch\\_from\\_kapustin\\_yar.shtml](http://russianforces.org/blog/2010/12/topol_launch_from_kapustin_yar.shtml): “Recent developments within Russian strategic missile systems,” *Russianspaceweb.com*, November 5, 2005, available at [http://www.russianspaceweb.com/rockets\\_icbm.html](http://www.russianspaceweb.com/rockets_icbm.html); “Russia has successfully tested the ‘Topol’,” *Melbourne Herald Sun*, July 6, 2012, available at <http://www.all-rss.com/item-155001-russia-has-successfully-tested-the-topol/#.UdXx4Jycsdw>; Hans Christensen, “Russian Missile Test Creates Confusion and Opposition in Washington,” *Federation of American Scientists*, July 3, 2013, available at <http://blogs.fas.org/security/2013/07/yars-m/>.

<sup>97</sup> “Russia’s Strategic Missile Forces upgrade combat control systems,” *ITAR-TASS*, January 2, 2014, available at <http://www.en.itar-tass.com/russia/713674>.

<sup>98</sup> *Ibid.*

<sup>99</sup> “Russia testing intercontinental missile with ‘new hypersonic’ re-entry vehicles,” *Interfax-AVN*, October 3, 2013, available at <http://www.dialog.com/proquestdialog/>.

would constitute a circumvention rather than a legal violation of the INF Treaty.

The Russians are now saying the RS-26 is a derivative of the SS-27, that the weight of its launchers is 40 tons lower than the RS-24/Yars, that it is cheaper than the RS-24,<sup>100</sup> and that it is MIRVed and carries hypersonic maneuvering warheads. A number of prominent Russian experts have said the RS-26 has a theater attack mission. According to *Kommersant*, former Duma Defense Committee Vice Chairman Alexsey Arbatov, said, “judging from the unofficial assessments of the experts, this system is also designed for intermediate-range targeting, which de facto corresponds to the category of missiles eliminated under the [INF] Treaty...”<sup>101</sup> He also linked the MIRVed payload to intermediate-range targeting. Sergey Rogov, Vice Admiral (ret.) Valentin Kuznetsov, Colonel General (ret.) Viktor Yesin and Major General (ret.) Pavel Zolotarev, experts associated with the USA and Canada Institute of the Russian Academy of Sciences, have called the Rubezh “an ICBM but with reduced flight range (consequently, it can accomplish missions for the destruction of targets in the European Theater).”<sup>102</sup>

A 2013 unclassified Air Force intelligence report made an obvious reference to the RS-26. It describes the “new ICBM” (the Russians had not yet called it the RS-26) as

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<sup>100</sup> “Russia: New RS-26 Missile Seen as ‘Economical Replacement’ for Topol, Is INF-Compliant,” Moscow *Vedomosti Online*, October 8, 2010, available at <http://www.dialog.com/proquestdialog/>.

<sup>101</sup> “Russia: US Suspicions of Russi[a]n Violations of INF Treaty Refuted,” *Kommersant*, December 12, 2013, available at <http://www.dialog.com/proquestdialog/>.

<sup>102</sup> “Russian Experts Assess U.S. Missile Defense Capabilities, List Topics for Arms Negotiations,” Moscow *Nezavisimoye Voyennoye Obozreniye Online*, August 5, 2013, available at <http://www.dialog.com/proquestdialog/>.

having “at least two stages” and a range of 5,500-km+.<sup>103</sup> It indicates its range is much lower than any other Russian ICBM. By comparison, it lists the range of the SS-19 as 9,000-km+, the SS-18 as 10,000-km+, the SS-25, the SS-27 Mod-1, and the SS-27 Mod-2 as 11,000-km. Russian sources support the Air Force intelligence assessment of the new missile.

In December 2013, Russia made it clear that the RS-26/Rubezh is significantly lighter than the Russian RS-24 ICBM (SS-27). The Commander of the Strategic Missile Forces, Colonel General Sergei Karakayev, said, “If we are to speak about the Yars [RS-24/SS-27 Mod 2] land-based mobile system, the launcher weighs more than 120 tonnes. The new missile [RS-26] will weigh less, no more than 80 tonnes.”<sup>104</sup> Pavel Podvig, a Russian émigré who specializes in Russian strategic systems, has written, “Although the missile is legally indeed an ICBM, it may well be that the demonstrated range of 5,800-km is close to the maximum range of the missile.”<sup>105</sup> (General Karakayev said later that the range in this test was over 5,600-km and the Russian announcement of the test indicated that it carried only a single RV.) Thus, if Podvig is correct, the RS-26 may be unable to propel its MIRV warhead package to even minimum ICBM range and the missile would not have enough range to target the U.S. from any likely launch point. If so, the missile is clearly a replacement for the Soviet SS-20 MIRVed IRBM eliminated by the INF Treaty. This is the basis of the judgment that it is a circumvention of the INF Treaty.

For many years Russia has been talking about creating a two stage SS-27 to perform the role of an intermediate-

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<sup>103</sup> “Ballistic and Cruise Missile Threat,” (Wright-Patterson Air Force Base, OH.: National Air and Space Intelligence Center), p. 21, available at <http://www.afisr.af.mil/shared/media/document/AFD-130710-054.pdf>.

<sup>104</sup> “Russia’s Strategic Missile Forces upgrade combat control systems,” op. cit.

<sup>105</sup> Pavel Podvig, “Too many missiles - Rubezh, Avangard, and Yars-M,” *Russianforces.org*, July 6, 2013, available at <http://www.russianforces.org/blog/>.

range missile. In December 2011, Moscow's Institute of Thermal Technology general designer Yuri Solomonov said, "The transformation of an intercontinental missile into a shorter range missile is not a very difficult task. There are certain problems but they are solvable."<sup>106</sup> In the words of Colonel General (ret.) Viktor Yesin, former Commander of the Strategic Missile Force, "Roughly speaking, if the third-stage engine is removed from our three-stage intercontinental ballistic missile Topol-M [SS-27], one will have an intermediate range missile."<sup>107</sup>

According to Pavel Podvig, it is "possible that the new missile takes the first two stages of RS-24 - this was done in the past with Temp-2S [SS-16 ICBM] and Pioner/SS-20 [IRBM] and it will be compatible with various bits of information about the new TEL [transporter erector launcher] as well as much of the INF controversy."<sup>108</sup> This could also be the basis for the claim that the RS-26 is cheaper since it is not necessary to pay for the omitted stage and it has a lighter, presumably less expensive, launcher. It could also be the basis of the Russian classification of the missile as a "new type" of ICBM.

A MIRVed IRBM could technically become an ICBM under New START by flying it with a single warhead to over 5,500-km, thus evading the INF Treaty prohibition. The elimination of all START qualitative and numerical limitations on ICBMs and SLBMs in the New START Treaty makes it fairly easy to circumvent the INF Treaty. Thus, if a two stage version of the SS-27 was tested to ICBM range

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<sup>106</sup> "Possible to transform intercontinental missile into shorter range missile - designer," *Interfax-AVN*, December 20, 2010, available at <http://business.highbeam.com/407705/article-1G1-244976711/possible-transform-intercontinental-missile-into-shorter>.

<sup>107</sup> "Russia, US Can Make INF Missiles In 2-4 Yrs, If Need Be - Analyst," *ITAR-TASS*, February 20, 2010, available at <http://www.wnc.dialog.com/>.

<sup>108</sup> Pavel Podvig, "More news about RS-26 missile," *Russianforces.org*, December 18, 2013, available at [http://russianforces.org/blog/2013/12/more\\_news\\_about\\_rs-26\\_missile.shtml](http://russianforces.org/blog/2013/12/more_news_about_rs-26_missile.shtml).

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in the first test and the same missile tested to INF range in the second and third tests, the missile would be a circumvention of the INF Treaty rather than a legal violation.

If the START Treaty were still in effect and the RS-26/Rubezh exited a production facility as a two stage configuration with the SS-27 Mod 2/RS-24 first stage, the missile would clearly violate it due to the START Treaty's 28<sup>th</sup> Agreed Statement that codifies classification of missiles on the basis of its first stage and imposes a major penalty if it is breached. New START has the same missile type classification rule as old START but no 28<sup>th</sup> Agreed Statement. Under START and New START the first stage of an ICBM maintained, stored and transported as an assembled missile is not supposed to leave a production facility without all its upper stages attached. This is very important to the verification regime. In the 1990s the Russians actually ran afoul of the 28<sup>th</sup> Agreed Statement when the space-launch version of the SS-25 exited the production facility with only one of its two upper stages attached to the first stage.<sup>109</sup> While the RS-26 is a weapon rather than a space-launch derivative of an ICBM, the same legal principles apply. However, absent a 28<sup>th</sup> Agreed Statement in New START, it would be difficult to argue that the RS-26 violated New START.

Had the Clinton Administration enforced the 28<sup>th</sup> Agreed Statement and if it had been included in New START, it might have prevented the RS-26 at least in its current form. An alternative approach would have probably been far more expensive. Instead, the Clinton Administration let the Russians off the hook,<sup>110</sup> and the

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<sup>109</sup> The START Treaty, Joint Statement 21, available at [http://www.acq.osd.mil/tc/treaties/start1/other/jcic\\_joint\\_statements/joint\\_statements\\_21.htm](http://www.acq.osd.mil/tc/treaties/start1/other/jcic_joint_statements/joint_statements_21.htm).

<sup>110</sup> In Joint Statement 21, the Clinton administration agreed to waive the penalty imposed by the 28<sup>th</sup> Agreed Statement.

Obama Administration agreed to the New START Treaty without the 28<sup>th</sup> Agreed Statement. If the RS-26 really is a derivative of the RS-24/Yars as the Russians claim, it owes its legal existence to a flawed U.S. approach to New START.

The preceding analysis assumes the Russians are accurate in their characterization of the RS-26/Rubezh as a derivative of RS-24/Yars. This may not be the case. Pavel Podvig believes that this launcher is the Rubezh missile launcher.<sup>111</sup> It is possible that it carries a missile smaller and lighter than a two stage RS-24/Yars.

A *Vesti.ru* newscast contains a video of the launcher used in the second RS-26 test that appears to confirm Podvig's conclusion that this is the RS-26 launcher. Podvig has pointed out that this new mobile launcher can't carry the SS-27 Mod 2/Yars missile. Podvig's conclusion appears consistent with what General Karakayev has said about the weight of the Yars launcher and the RS-26 launcher.<sup>112</sup> The launcher appears similar to the type of launchers the Russians use for non-canisterized theater attack missiles.

After the first flight-test, *Vedomosti* reported that the missile now called the RS-26 is fairly small.<sup>113</sup> *Kommersant* has said, "According to Kommersant information, the officially unnamed missile complex in fact is a ground-based analog of the Bulava."<sup>114</sup> It quoted its sources as saying that the missile is similar to Bulava, with the weight of about 36 tons and the length of about 12 meters. This would be a missile that might fit on the six-axle Transporter Erector Launcher TEL depicted above. *Lenta.ru* also

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<sup>111</sup> Podvig, "Too many missiles - Rubezh, Avangard, and Yars-M," op. cit.

<sup>112</sup> Ibid.

<sup>113</sup> Aleksey Nikolskiy, "New Avangard Missile Seen Replicating Skorost-, Kuryer-Type Lightweight ICBM, 'Avangard Enigma'," *Moscow Vedomosti Online*, October 2013, available at <http://www.dialog.com/proquest dialog/>.

<sup>114</sup> Ivan Safronov, "Bulava Resurfaces in Plesetsk: What Sort of Missile In Point of Fact Did They Launch Yesterday in Russia," *Kommersant*, May 25, 2012, available at <http://www.dialog.com/proquest dialog/>.

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reported, “According to unconfirmed information, the new missile is a ground version of the Bulava sea-launched complex...”<sup>115</sup>

The missile *Kommersant* describes would probably be accountable as a Bulava 30 SLBM under New START. Pavel Podvig also has suggested that the RS-26 is a land-based Bulava 30.<sup>116</sup> Using a three stage Bulava 30 as an “ICBM” would likely be a cheaper option than a two stage version of the Yars or a two stage version of the Bulava 30 because they would likely need a more extensive flight test program.

In the middle part of the last decade there was an announced Russian program to develop a common missile based upon the Bulava 30.<sup>117</sup> This never made much sense for an ICBM but it could perform the IRBM attack role quite well. It is interesting that after the September 2013 launch failure of the Bulava 30, talk about an early deployment of the RS-26 terminated in Russia. Is there a connection?

If these reports are true and the missile is a three stage Bulava 30, it clearly violates the New START Treaty. The Bulava 30 is an SLBM and the START Treaty provides that, “Each Party shall install deployed launchers of SLBMs only on ballistic missile submarines.”<sup>118</sup> A two stage Bulava 30 derivative would, at a minimum, be a circumvention of the INF Treaty because its role would clearly be theater attack. Again, the omission of the 28<sup>th</sup> Agreed Statement in New START makes this possible. A Bulava 30 would make no sense for an ICBM role because its capabilities would be

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<sup>115</sup> “Russia Successfully Tested a New Ballistic Missile To Spite the European Missile Defense,” *Lenta.ru*, May 26, 2012, available at <http://www.wnc.dialog.com/>.

<sup>116</sup> *Ibid.*

<sup>117</sup> Mark. B. Schneider, “The Nuclear Forces and Doctrine of the Russian Federation,” (Fairfax, VA: National Institute Press, 2006), p. 11, available at <http://www.nipp.org/Publication/Downloads/Publication%20Archive%20PDF/Russian%20nuclear%20doctrine%20-%20NSF%20for%20print.pdf>.

<sup>118</sup> The New START Treaty, Article 4, paragraph 12, available at <http://www.state.gov/t/avc/newstart/c44126.htm>.

marginal to attack the U.S. from likely deployment areas even if it were the three stage Bulava 30. According to the Air Force intelligence report on worldwide missile capability, the three stage Bulava 30 has about 3,000-km less range than the RS-24/Yars.<sup>119</sup> As noted above, a range of 5,500-km legally makes a ground-launched missile an ICBM but it does not give the missile real ICBM targeting capability against the U.S.

Podvig's analysis<sup>120</sup> could explain the changing names for RS-26 missile. First calling it a Yars-M could have been linked it to a desire not to raise the issue of INF compliance by suggesting it was an ICBM. The name "Rubezh" may be linked to a need to avoid explaining why the Yars-M was not a Yars, which would be the case if it is a Bulava 30 derivative.

To come to a definitive judgment on the RS-26/Rubezh it would be necessary for the Obama Administration to provide unclassified information concerning what has actually happened. We would need to know the characteristics of the RS-26, how they compare to the SS-27 Mod 2/RS-24 and the Bulava 30 and how far it went on the first successful test.

The threat to U.S. allies from the RS-26/Rubezh is quite substantial. If the missile were placed on a rail mobile launcher, it would be completely outside of any arms control limitations. Significantly, the New START Treaty omitted all references to rail mobile ICBMs and changed the mobile ICBM launcher definition to exclude them.<sup>121</sup> Not

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<sup>119</sup> "Ballistic and Cruise Missile Threat," op. cit., p. 21.

<sup>120</sup> Podvig, "Too many missiles - Rubezh, Avangard, and Yars-M," op. cit.

<sup>121</sup> Schneider, *New START: The Anatomy of a Failed Negotiation*, op. cit., pp. 7-9; Christopher Ford, "Does 'New START' Fumble Reloads and Rail Mobile ICBMs?," *Newparadigmsforum.com*, April 26, 2010, available at [http://www.newparadigmsforum.com/New\\_Paradigms\\_Forum/Nuclear\\_Weapons/Entries/2010/4/26\\_New\\_START\\_Fumbles\\_Missile\\_REloads\\_and\\_Rail-Mobile\\_ICBMs.html](http://www.newparadigmsforum.com/New_Paradigms_Forum/Nuclear_Weapons/Entries/2010/4/26_New_START_Fumbles_Missile_REloads_and_Rail-Mobile_ICBMs.html).; "An Independent Assessment of New START Treaty,"

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surprisingly, Russia has announced it is developing a rail mobile ICBM.<sup>122</sup> It will reportedly be based on the Yars.<sup>123</sup> Hence, it is certainly possible that the RS-26 will end up on rail mobile launcher and hence not limited in numbers by New START unless the Treaty is amended.

### **The Moscow ABM and Surface-to-Air Missile (SAM) Issues**

The issue of whether or not the Moscow ABM system, the S-300 and S-400 surface-to-air missiles and the new S-500 ABM system now under development in Russia have prohibited INF capabilities depends largely on the fact situation since the legal issues are clear. If what has been reported in the Russian press is true, Russia has violated the INF Treaty. This may also explain the ridiculous Russian charges that the U.S. GBI missile is a prohibited INF missile system. Russia tends to mirror image its own behavior on to the U.S.

In July 2010, Pavel Felgengauer, a distinguished Russian journalist, wrote: "...Moscow plans to covertly quit the 1987 treaty on medium and short-range missiles" because the Russian S-300 and the S-400 air defense missiles, the new S-500 air and missile defense interceptor and the Moscow

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Heritage Foundation, April 30, 2010, available at <http://www.heritage.org/Research/Reports/2010/04/An>.

<sup>122</sup> "Russia Plans Rail-Mounted Missiles to Counter US Global Strike Program," *Ria Novosti*, December 18, 2013, available at [http://en.ria.ru/military\\_news/20131218/185683711/Russia-Plans-Rail-Mounted-Missiles-to-Counter-US-Global-Strike.html](http://en.ria.ru/military_news/20131218/185683711/Russia-Plans-Rail-Mounted-Missiles-to-Counter-US-Global-Strike.html).: "Russia designing 'new' rail-mobile ICBM system, troops getting new missiles," *Interfax-AVN*, December 13, 2013, available at <http://www.dialog.com/proquest/dialog/>; "Russia steps up developing new rail-mobile missile systems," *Interfax*, December 26, 2012, available at [http://rbth.ru/articles/2012/12/26/Russia\\_steps\\_up\\_developing\\_new\\_rail-mobile\\_missile\\_systems\\_21476.html](http://rbth.ru/articles/2012/12/26/Russia_steps_up_developing_new_rail-mobile_missile_systems_21476.html).

<sup>123</sup> "Russia successfully tests latest 'YARS' intercontinental ballistic missile," *RT*, December 24, 2013, available at <http://rt.com/news/yars-missile-russia-launch-729/>.

ABM interceptors are nuclear armed and can function as “dual-use as conventional or nuclear medium or shorter range ballistic missiles.”<sup>124</sup> He has also written that such capability was actually “demonstrated” in the Russian Vostok-2010 military exercise conducted in the Far East.<sup>125</sup> *Red STAR*, the official newspaper for the Russian Defense Ministry, has reported that Russia has 700 nuclear warheads for the Moscow ABM and its surface-to-air missiles.<sup>126</sup>

The INF Treaty contains an exception to allow for missile defense and air defense interceptors missiles used “solely” for air or missile defense,<sup>127</sup> but that exception would be lost if it also had a surface-to-surface role. Absent this exception, many ABM interceptor missiles and surface-to-air missiles would be prohibited by the INF Treaty. If what Felgengauer claims is true, the Moscow ABM system violated the INF Treaty since its first day in force. The range of some of its interceptors was long.<sup>128</sup> Whether the S-300 and S-400 surface-to-air missiles violate the INF Treaty depends upon their testing history. If the S-500 has a surface-to-surface role, it would be virtually impossible for this missile with a stated intercept range of 600-km<sup>129</sup> not to violate the INF Treaty once it is fully tested.

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<sup>124</sup> Pavel Felgenhauer, “Russia Seeks to Impose New ABM Treaty on the US by Developing BMD,” *Eurasia Daily Monitor* Volume: 7 Issue: 136 July 16, 2010, available at [http://www.jamestown.org/single/?no\\_cache=1&tx\\_ttnews\[tt\\_news\]=36624](http://www.jamestown.org/single/?no_cache=1&tx_ttnews[tt_news]=36624)

<sup>125</sup> Ibid.

<sup>126</sup> “In a Broad Context,” *Krasnaya Zvezda Online*, April 29, 2011, available at <http://www.dialog.com/proquest/dialog/>.

<sup>127</sup> The INF Treaty, Article VII, paragraph 3, available at <http://www.acq.osd.mil/tc/treaties/inf/text.htm#article4>.

<sup>128</sup> *Soviet Military Power* (Washington, D.C.: U.S. Department of Defense, 1987), p. 47.

<sup>129</sup> “Russia Develops the S-500 – a New Anti-Missile Defense System,” *Defense Update.com*, September 26, 2009, available at [http://defense-update.com/20090925\\_s-500.html](http://defense-update.com/20090925_s-500.html).: “Russia: S-500 Missile Defense System To Enter Service in 2015,” *Moscow Argumenty Nedeli Online*, October 14, 2010, available at <http://www.dialog.com/proquest/dialog/>.; “S-500 Development

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## Conclusion

The Russian INF Treaty non-compliance described in the Russian press is fully consistent with historic Soviet/Russian compliance behavior and the pattern of Russia threatening preemptive nuclear strikes against U.S. missile defenses deployed in Europe.<sup>130</sup> The U.S. government, until recently, has ignored this activity. Two weeks after the State Department confirmed *The New York Times* story concerning INF violations, Rose Gottemoeller, Acting Under Secretary of State for Arms Control and International Security delivered a speech entitled "Security Arm Control Priorities in 2014 and Beyond." It did not say a word about INF Treaty compliance or compliance in general. Her main agenda item was stated to be the ratification of the Comprehensive Test Ban Treaty which has its own set of outstanding Russian compliance issues.<sup>131</sup>

The Obama Administration's own compliance reports confirm that no meetings of the INF Special Verification Commission were held and no INF issues were raised with the Russians through the end of 2012.<sup>132</sup> In light of the evidence reported in *The New York Times* account and by the Congressional leaders about cruise missile testing, the apparent inability of the Obama Administration to reach a logical conclusion on compliance is troubling. There are no legal issues impacting this decision. The Obama Administration is apparently ignoring its own interpretation of U.S. law relating to public disclosure of arms control violations. According to the administration's

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Will Be Completed in 2015," December 22, 2009, available at <http://www.dialog.com/proquestdialog/>.

<sup>130</sup> Schneider, "The Future of the U.S. Nuclear Deterrent," op. cit. pp. 349-350.

<sup>131</sup> Schneider, "Russian Violations of Its Arms Control Obligations," op. cit., pp. 344-347.

<sup>132</sup> *Ibid.*, p. 6.

2012 compliance report, 22 U.S.C. 2593a(6) requires that the unclassified version of the compliance report “identifies questions [about foreign arms control compliance], to the maximum extent practicable.”<sup>133</sup> The State Department’s confirmation of *The New York Times* report certainly makes an unclassified compliance report “practicable.” It is also troubling that, according to *The New York Times* and other reports, the Obama Administration knew about INF violations for years and did not even raise the issue with Russia until May 2013.

The general approach of the Obama Administration has been to provide the public almost no information on Russian arms control violations and it appears not to press Russia on compliance issues. In addition to saying nothing about INF compliance issues, the State Department’s 2010 compliance report only named START Treaty issues that had been resolved, but did not talk about other outstanding compliance issues. It revealed, “The United States raised new compliance issues since the 2005 Report,” but did not identify them.<sup>134</sup> It said that some of the new issues “were closed” but gave no further explanation of what those issues were, or how and why they were closed, or what issues remain.<sup>135</sup> Subsequent reports merely assert complete Russia compliance with New START, which seems unlikely given the State Department’s own 2011 report which states, “As expected, there have been differences and concerns with implementation.”<sup>136</sup> The report fails to elaborate on those “differences” and “concerns.”

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<sup>133</sup> *Ibid.*, p. 1.

<sup>134</sup> *Adherence to and Compliance with Arms Control and Nonproliferation Agreements and Commitments*, July 2010, p. 8, available at <http://www.state.gov/documents/organization/145181.pdf>.

<sup>135</sup> *Ibid.*

<sup>136</sup> “The New START Treaty,” (Washington, D.C.: U.S. Department of State, October 11, 2011), available at: <http://m.state.gov/md175945.htm>.

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A compliance judgment about the cruise missile issue is long overdue. A serious review of the Skorost retention issue, the RS-26/Rubezh issue, the Iskander M range issue and the dual role of Russian ABM and air defense missiles is certainly warranted. Beyond that, a penalty must be imposed on Russia for its violations and circumventions of the INF Treaty. A finding of a material breach of the INF Treaty is clearly warranted. Attempting to negotiate a new arms control agreement as President Barak Obama proposed in his June 2013 Berlin speech while Russia is violating existing agreements is quite dangerous to U.S. national security. As President Reagan observed, "Simply collecting agreements will not bring peace. Agreements genuinely reinforce peace only when they are kept. Otherwise, we are building a paper castle that will be blown away by the winds of war."<sup>137</sup>

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<sup>137</sup> President Ronald Reagan, "Remarks in New York, New York, Before the United Nations General Assembly Special Session Devoted to Disarmament," June 17, 1982, available at [http://www.reagan.utexas.edu/archives/speeches/1982/61782a.htm\\_](http://www.reagan.utexas.edu/archives/speeches/1982/61782a.htm_).



## Russia's Growing Strategic Nuclear Forces and New START Treaty Compliance \*

Russia's 2016 New START data, released by the Department of State, indicate that since New START's entry into force (EIF) in 2011, Russia has increased its deployed warheads. Russia has reached 1,735 deployed warheads, an increase of 198 warheads since New START's EIF when Russia had 1,537 deployed warheads.<sup>1</sup> Russia is now 185 warheads above the New START Treaty limit. U.S. data for the same period indicate the U.S. cut its warheads from 1,800 to 1,481, 69 below the New START limit of 1,550.<sup>2</sup> The Russian increase is even more impressive when it is compared with their level of 1,400 warheads in October 2013.<sup>3</sup> From this baseline, the increase is 325 warheads or about 24%.

According to Bill Gertz, an Obama Administration official told him, "The Russians are doubling their [nuclear] warhead output," and, "They will be exceeding the New START [arms treaty] levels because of MIRVing these new systems."<sup>4</sup> Gertz also reported Russia had added over 150

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\* Original publication: Mark B. Schneider, "Russia's Growing Strategic Nuclear Forces and New START Treaty Compliance," *Information Series*, No. 407 (Fairfax, VA: National Institute Press, June 21, 2016).

<sup>1</sup> Russian Ministry of Foreign Affairs, "New START Treaty Aggregate Numbers of Russian and US Strategic Offensive Arms (Fact Sheet)," *Russian Ministry of Foreign Affairs*, June 27, 2011, available at [http://www.mid.ru/brp\\_4.nsf/0/55016EBF869728C1C32578BD0058B349](http://www.mid.ru/brp_4.nsf/0/55016EBF869728C1C32578BD0058B349); U.S. Department of State, "New START Treaty Aggregate Numbers of Strategic Offensive Arms," *U.S. Department of State*, April 1, 2016, available at <http://www.state.gov/t/avc/rls/2016/255377.htm>.

<sup>2</sup> Ibid.

<sup>3</sup> U.S. Department of State, "New START Treaty Aggregate Numbers of Strategic Offensive Arms," *U.S. Department of State*, October 1, 2013, available at <http://www.state.gov/t/avc/rls/215000.htm>.

<sup>4</sup> Bill Gertz, "Russia Doubling Nuclear Warheads," *The Washington Free Beacon*, April 1, 2016, available at <http://freebeacon.com/national-security/russia-doubling-nuclear-warheads/>.

more warheads during the past year.<sup>5</sup> This appears consistent with what Russian leaders say they are doing with regard to nuclear force modernization. We are now five years into the New START Treaty's seven-year reduction period (2011-2018) and all we have seen is increases in Russian nuclear warheads. The only reductions being made are unilaterally by the U.S. It is likely the U.S. will be down to all the New START limits in the near future.

## Russian Compliance Issues

The Department of State is required by the New START Treaty's Resolution of Ratification to submit an annual report on New START implementation including a section on Russian reductions. Significantly, it has never mentioned the inconvenient fact that Russia has increased, not decreased, its strategic nuclear warheads.<sup>6</sup> These annual reports say the U.S. has "raised implementation-related questions with the Russian Federation" but the reports have not revealed what these issues are or their significance.<sup>7</sup> In 2014, Brian McKeon (then a senior NSC official and now Principal Deputy Under Secretary of Defense for Policy) stated that in September 2010 the Senate had been informed of a compliance issue that "implicated possibly New START, possibly INF."<sup>8</sup> Also, in December 2014, Russian

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<sup>5</sup> Bill Gertz, "Russia Deployed Over 150 New Warheads in Past Year," *The Washington Free Beacon*, April 6, 2016, available at <http://freebeacon.com/national-security/russia-deployed-150-new-warheads-past-year/>.

<sup>6</sup> U.S. Department of State, *Annual Report On Implementation Of The New Start Treaty* (Washington, D.C.: U.S. Department of State, January 2016), available at <http://www.state.gov/t/avc/rls/rpt/2016/255558.htm>.

<sup>7</sup> Ibid.

<sup>8</sup> "Hearing to consider the nominations of: Hon. Robert O. Work to be Deputy Secretary of Defense; Hon. Michael J. McCord to be Under Secretary of Defense (Comptroller); Christine E. Wormuth to be Under Secretary of Defense for Policy; Brian P. McKeon to be Principal Deputy Under Secretary of Defense for Policy; Hon. David B. Shear to be Assistant Secretary of Defense for Asian and Pacific

ICBM force Commander Colonel-General Sergey Karakayev said, "There are currently around 400 missiles [ICBMs] with warheads on combat duty."<sup>9</sup> Yet, Russia's declared strategic force numbers make it impossible for Russia to have more than about 300 ICBMs legally "with warheads on combat duty."<sup>10</sup>

Another possible compliance issue could concern heavy-bomber counting rules. In 2012, the Commander of the Russian Air Force stated that the Su-34 long-range strike fighter would be given "long-range missiles...Such work is under way and I think that it is the platform that can solve the problem of increasing nuclear deterrence forces within the Air Force strategic aviation."<sup>11</sup> This cannot be done legally without declaring the Su-34 to be a heavy bomber which has not been done.

It is clear that Russia desires to increase its strategic nuclear forces quantitatively and qualitatively. Russia has modernization programs underway that would circumvent the New START Treaty including two bomber types, a rail-mobile ICBM, a nuclear-powered nuclear-armed drone submarine and reportedly an air-launched ICBM which either do not count under New START or count at a severely discounted level.<sup>12</sup> These circumvention programs are more

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Security Affairs; and Eric Rosenbach to be Assistant Secretary of Defense for Homeland Defense," *Senate Armed Services Committee*, 114th U.S. Congress, February 25, 2014, p. 28, available at <http://www.armed-services.senate.gov/imo/media/doc/14-08%20-%202-25-14.pdf>.

<sup>9</sup> "Some 400 ICBMs are on combat duty in Russia - RVSN commander," *Interfax*, December 16, 2014, available at <http://search.proquest.com/professional/login>.

<sup>10</sup> Pavel Podvig estimated 311 ICBMs were deployed in January 2014. See Pavel Podvig, "Russian strategic forces in January 2014," *RussianForces.org*, January 15, 2015, available at [http://russianforces.org/blog/2014/01/russian\\_strategic\\_forces\\_in\\_20.shtml](http://russianforces.org/blog/2014/01/russian_strategic_forces_in_20.shtml).

<sup>11</sup> "Russian strategic aviation to be reinforced with Su-34 frontline bombers," *Interfax-AVN*, March 19, 2012, available at <http://search.proquest.com/professional/login>.

<sup>12</sup> Mark B. Schneider, "Nuclear Deterrence in the Context of the European Security Crisis and Beyond," *The Heritage Foundation*, December 21, 2015, pp. 4-5,

expensive than ignoring the limits and producing more existing systems indicating Russia's strong interest in the programs. Thus, Russia may withdraw from New START by mid-2017 or it may illegally suspend its obligations under New START as it has done with the Conventional Forces in Europe (CFE) Treaty. This would allow Moscow to pocket the U.S. reductions while making little to none of their own. Indeed, a senior Ministry of Foreign Affairs official has suggested that Russia could withdraw from the Treaty.<sup>13</sup> If it does so, no penalty will likely be imposed on Russia—just as there has seemingly been none for its INF Treaty or CFE Treaty violations.

### **The Odds of Compliance**

It is still possible that Russia will comply with New START in 2018. However, the probability is declining because reductions take time. Compliance with New START is being made more difficult by the Russian strategic nuclear modernization program which will probably increase the number of warheads Russia must remove from accountability in 2016 and 2017 by 147-177.<sup>14</sup> Added to the 185 warheads they already have above the Treaty mandated 1,550 limit, they would have to remove from accountability 332-362 warheads, presumably by warhead removal (down-loading). The just announced improved version of

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available at <http://www.heritage.org/research/reports/2015/12/nuclear-deterrence-in-the-context-of-the-european-security-crisis-and-beyond>; Piotr Butowski, "Russia's Air Force 2025," *Air International*, January 2014, pp. 98-99.

<sup>13</sup> "Russia threatens to quit START as US deploys Aegis destroyer to Spain," *RT*, February 2, 2014, available at <http://www.rt.com/news/destroyer-us-poland-start-treaty-530/>; "Diplomat Says Russia May Review START, Awaits Details of Alleged INF Violations," *RIA Novosti*, January 13, 2015, available at <http://search.proquest.com/professional/login>.

<sup>14</sup> The assumption here is that Russia will continue in 2016-2017 to deploy new SS-27 Mod 2/RS-24 Yars ICBMs at about the current rate and that Russia will also deploy the first regiment of RS-26 in 2017 as has been reported in the Russian press.

the SS-27 ICBM (to be tested in 2016) and the improved Bulava-30 SLBM (to be tested in two to three years)<sup>15</sup> could result in an increased number of warheads accountable under New START when they are deployed. There are many Russian press reports that suggest that the number of warheads on the SS-27 ICBM and the Bulava-30 SLBM will be increased to 10 from the currently reported 4-6 warheads.<sup>16</sup> This is exactly the opposite of what Russia should be doing if it intends to live under New START. The new Russian Sarmat heavy ICBM, which reportedly will carry up to 15 warheads,<sup>17</sup> is another program that is exactly the opposite of what the Russians should be doing to comply with New START in terms of possible warhead numbers.

In addition to the increased number of warheads, the deployment of new mobile ICBMs in 2016-2017 will increase on a one-for-one basis the number of existing launchers the Russians will have to eliminate in what is now

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<sup>15</sup> "Upgraded ICBM for Yars systems to be tested in coming months - designer," *Interfax*, May 16, 2016, available at [http://search.proquest.com/professional/login](http://search.proquest.com/professional/login;).; "Upgraded strategic missiles Bulava to significantly increase efficacy of Borei submarines - designer Solomonov (Part 2)," *Interfax*, May 16, 2016, available at <http://search.proquest.com/professional/login>.

<sup>16</sup> U.S. Department of State, "Russian Federation MOU Data," *U.S. Department of State*, January 1, 2007, available at <http://2001-2009.state.gov/documents/organization/83235.pdf>.; Charles P. Vick, "A Highly Modified Topol-M/SS-27," *Globalsecurity.org*, October 10, 2013, available at <http://www.globalsecurity.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 <https://www.rt.com/news/217795-russia-nuclear-missile-trains/>.; "New START: Potemkin Village Verification," The New START Working Group, *The Heritage Foundation*, June 24, 2010, p. 7, available at <http://www.heritage.org/research/reports/2010/06/new-start-potemkin-village-verification>.

<sup>17</sup> "New Heavy ICBM to Be Put Into Service in 2018 - Expert (Part 2)," *Interfax*, May 5, 2011, <http://www.interfax.co.uk/russia-cis-military-news-bulletins-in-english/new-heavy-icbm-to-be-put-into-service-in-2018-expert-part-2-2/>.; "Russia to build RS-20 'Voyevoda' successor," *Interfax-AVN*, July 21, 2011, available at <http://www.interfax.co.uk/russia-cis-military-news-bulletins-in-english/russia-to-build-rs-20-voevoda-successor/>.

less than two years, the remainder of the New START reduction period.

The only evidence of a Russian intent to comply with New START is a March 2016 story in state-run *RT* which reports that Russia is disarming a Typhoon missile submarine. According to the shipyard undertaking the procedures, "We will remove the covers of the submarine's missile launchers and seal them, thus making it impossible to use the vessel's missile weapons. .... We are not talking yet about dismantling the submarine itself. The tender for this procedure has not yet been announced."<sup>18</sup> This would reduce the number of Russian launchers by 20 but not the number of warheads because the Typhoon submarines reportedly have not been operational for a long time.<sup>19</sup> Moreover, if this is all they are doing there is a potential compliance problem with the New START Treaty provision which requires, "The elimination of SLBM launchers shall be carried out by removing all missile launch tube hatches, their associated superstructure fairings, and, if applicable, gas generators."<sup>20</sup> To comply with New START Russia will probably have to remove the launchers from three submarines, eliminate several dozen mobile ICBM launchers and download several hundred warheads.

Even if Russia were to comply with New START, the actual number of deployed Russian warheads will far exceed the stated New START ceiling of 1,550 in part because of the bomber counting rule. State-run *Sputnik News* says Russia will have 2,100 actual deployed strategic

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<sup>18</sup> "Russia to disarm world's largest nuclear ballistic missile submarine, *RT*, March 11, 2016, available at <https://www.rt.com/news/335300-russia-disarms-nuclear-sub/>.

<sup>19</sup> "Inside of Class Typhoon Atomic Submarine," *Englishrussia.com*, May 3, 2014, available at <http://english.russia.com/2014/05/03/inside-of-class-typhoon-atomic-submarine/>.

<sup>20</sup> U.S. Department of State, New START Treaty, Protocol, Section 4, paragraph 1, available at <http://www.state.gov/documents/organization/140047.pdf>.

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nuclear warheads under New START.<sup>21</sup> Hans Kristensen and Robert Norris, of the Federation of American Scientists, write that Russia has approximately 2,500 strategic nuclear weapons currently.<sup>22</sup> That claim was made before Russia announced a program to build at least 50 new Tu-160 bombers,<sup>23</sup> which could push this number to over 3,000 deployed warheads when the bombers are completed. It could go even higher.

### **Future Arms Control**

Since the signing of the New START Treaty in 2010, Russia has refused to negotiate deeper cuts in strategic nuclear weapons or limitations on tactical nuclear weapons. In 2013, then-Deputy Prime Minister (now Kremlin Chief of Staff) Sergei Ivanov explained why: "When I hear our American partners say: 'let's reduce something else', I would like to say to them: 'excuse me, but what we have is relatively new'. They [the U.S.] have not conducted any upgrades for a long time. They still use Trident [missiles]."<sup>24</sup> Indeed, the notional replacement date for the already decades-old Trident missile is 2042.

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<sup>21</sup> "New START Nuclear Arms Reduction Treaty Between Russia, US in Details," *Sputnik News*, April 8, 2015, available at <http://sputniknews.com/politics/20150408/1020602118.html>.

<sup>22</sup> Hans M. Kristensen and Robert S. Norris, "Russian Nuclear Forces, 2015," *Bulletin of the Atomic Scientists*, Vol. 71, No. 3 (April, 2015), p. 85, available at <http://bos.sagepub.com/content/71/3/84.full.pdf+html>.

<sup>23</sup> "Russia to Renew Production of Tu-160 'Blackjack' Strategic Bomber," *Sputnik News*, April 29, 2015, available at <http://sputniknews.com/military/20150429/1021514706.html>.

<sup>24</sup> "Russia today is not interested in U.S.-proposed arms reduction - Sergei Ivanov," *Interfax*, March 5, 2013, available at <http://search.proquest.com/professional/login>.

## Implications

Why should we be concerned about this? Russian cheating on a treaty should always be a serious concern. Perhaps more importantly, however, Russian behavior illustrates an aggressive nuclear buildup. Additionally, Russia seemingly has the lowest nuclear first use threshold in the world. In 2016, U.K. General Sir Richard Shirreff, Deputy NATO military commander in Europe between 2011 and 2014, observed, "...Russian use of nuclear weapons is hardwired into Moscow's military strategy."<sup>25</sup> Its military doctrine calls for using nuclear weapons first in local and regional wars, according to Russian National Security Council Secretary Nikolai Patrushev.<sup>26</sup> It reportedly practices nuclear first use in its military exercises and makes repeated nuclear attack threats against members of NATO.

Simulated Russian first use of nuclear weapons reportedly began in the Zapad-1999 theater war exercise. Then-Defense Minister Marshall Igor Sergeev announced, "Our Army was forced to launch nuclear strikes first which enabled it to achieve a breakthrough in the theater situation."<sup>27</sup> Simon Saradzhyan of the Harvard Belfer Center has observed, "...the Russian military has repeatedly gamed out use of strategic bombers to carry out such a demonstration nuclear strike during a number of wargames, including the Zapad (West) exercise, which is held annually to simulate a war with NATO."<sup>28</sup> In January

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<sup>25</sup> "Ex-general says NATO-Russia nuclear war 'possible within a year,'" *RT*, May 18, 2016, available at <https://www.rt.com/news/343420-nato-nuclear-war-russia/>.

<sup>26</sup> "Russia Classifies Information on Pre-emptive Nuclear Strikes - Military," *BBC Monitoring Former Soviet Union*, September 5, 2014, available at <http://search.proquest.com/professional/login>.

<sup>27</sup> Vladimir Sokirko, "Top-ol, Top-ol!!" *Moskovskiy Komsomolets*, December 23, 1999.

<sup>28</sup> Simon Saradzhyan, *Russia's Non-strategic Nuclear Weapons in Their Current Configuration and Posture: A Strategic Asset or Liability?* (Cambridge, MA: Harvard

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2016, NATO released its annual report which noted, "Russia has conducted at least 18 large-scale snap exercises, some of which have involved more than 100,000 troops. These exercises include simulated nuclear attacks on NATO Allies (eg, ZAPAD) and on partners (eg, March 7 2013 simulated attacks on Sweden)..."<sup>29</sup>

Senior Russian officials also make nuclear threats beyond the implied threats of simulated nuclear strikes during military exercises. In 2008, Yuri Baluyevsky, then-Chief of the General Staff, stated that "for the protection of Russia and its allies, if necessary, the Armed Forces will be used, including preventively and with the use of nuclear weapons."<sup>30</sup> President Putin has personally made several threats to target Russia's missiles at U.S. friends and allies.<sup>31</sup> For example, in 2008, Putin stated that in response to U.S. missile defense deployment, Russia would "probably be forced to retarget some of our missile systems at these systems, which threaten us."<sup>32</sup> In 2009, Nikolai Patrushev said that Russian nuclear doctrine "does not rule out a nuclear strike targeting a potential aggressor, including a preemptive strike, in situations critical to national

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Belfer Center, January 2010), p. 18, available at <http://belfercenter.ksg.harvard.edu/files/russian-position-NSNWs.pdf>.

<sup>29</sup> *The Secretary General's Annual Report 2015* (Brussels, Belgium: NATO, January 2016), p. 18, available at [http://www.nato.int/nato\\_static\\_fl2014/assets/pdf/pdf\\_2016\\_01/20160128\\_SG\\_AnnualReport\\_2015\\_en.pdf](http://www.nato.int/nato_static_fl2014/assets/pdf/pdf_2016_01/20160128_SG_AnnualReport_2015_en.pdf).

<sup>30</sup> "Russia: We may use nukes if threatened," *The Jerusalem Post*, January 19, 2008, available at <http://www.jpost.com/International/Russia-We-may-use-nukes-if-threatened>.

<sup>31</sup> "Testimony Prepared By: Dr. Keith B. Payne Professor and Head, Graduate Department of Defense and Strategic Studies Missouri State University Commissioner, Congressional Strategic Posture Commission," *Senate Appropriations Subcommittee on Energy and Water Development*, 113th Congress, July 25, 2012, available at <http://www.nipp.org/wp-content/uploads/2014/12/July-25-testimony-for-web.pdf>.

<sup>32</sup> *Ibid.*

security.”<sup>33</sup> In December 2013, Deputy Prime Minister Dmitri Rogozin said if Russia is subject to a conventional attack, “we will certainly resort to using nuclear weapons in certain situations to defend our territory and state interests.”<sup>34</sup> In September 2014, General Baluyevskiy stated “...conditions for pre-emptive nuclear strikes...is contained in classified policy documents.”<sup>35</sup>

In March 2015, Russia’s Ambassador to Denmark Mikhail Vanin made, perhaps, the most explicit of the nuclear targeting threats: “I don’t think that Danes fully understand the consequence if Denmark joins the American-led missile defence shield. If they do, then Danish warships will be targets for Russian nuclear missiles.”<sup>36</sup> In 2016, Dr. Keith Payne observed, “Russian leaders, for example, have said that Romania could be turned into “smoking ruins,” and that Poland will be in its “cross hairs.”<sup>37</sup>

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<sup>33</sup> “Russia’s New Military Doctrine Does Not Rule Out Possible Nuclear Strike – Patrushev,” *Daily News Bulletin*, November 20, 2009, available at <http://search.proquest.com/professional/login>.

<sup>34</sup> “Russia will use nukes in case of a strike – official,” *RT*, December 12, 2013, available at <http://rt.com/politics/nuclear-strike-attack-rogozin-053/>.

<sup>35</sup> “Russia classifies information on pre-emptive nuclear strikes – military,” *BBC Monitoring Former Soviet Union*, September 5, 2014, available at <http://search.proquest.com/professional/login>.

<sup>36</sup> Julian Isherwood, “Russia warns Denmark its warships could become nuclear targets,” *Telegraph.com*, March 21, 2015, available at <http://www.telegraph.co.uk/news/worldnews/europe/denmark/11487509/Russia-warns-Denmark-its-warships->.

<sup>37</sup> Keith Payne, “Responding to the Emerging Potential for a War in Europe,” *Real Clear Defense*, June 2, 2016), p. 2, available at [http://www.realcleardefense.com/articles/2016/06/03/responding\\_to\\_the\\_emerging\\_potential\\_for\\_war\\_in\\_europe\\_109414.html](http://www.realcleardefense.com/articles/2016/06/03/responding_to_the_emerging_potential_for_war_in_europe_109414.html).

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Russian nuclear strategy appears to call for nuclear first use for “de-escalation” of a conflict. In June 2015, U.S. Deputy Secretary of Defense Robert Work and then-Vice Chairman of the Joint Chiefs of Staff Admiral James Winnefeld observed, “Russian military doctrine includes what some have called an ‘escalate to de-escalate’ strategy—a strategy that purportedly seeks to deescalate a conventional conflict through coercive threats, including limited nuclear use,” a policy they categorized as “playing with fire.”<sup>38</sup> In March 2016, Robert Scher, Assistant Secretary of Defense for Strategy, Plans and Capabilities, testified before the Congress that Russia has “adopted a pattern of reckless nuclear posturing and coercive threats. Russia remains in violation of the Intermediate-Range Nuclear Forces (INF) Treaty and remains unreceptive to the President’s offer to negotiate further reductions in strategic nuclear weapons below the limits of the New START Treaty.” He continued, “Russia’s purported doctrine of nuclear escalation to deescalate a conventional conflict amounts to a reckless gamble for which the odds are incalculable and the outcome could prove catastrophic.”<sup>39</sup>

Summing up the NATO security environment, NATO Secretary General Jens Stoltenberg said recently, “Russia’s rhetoric, posture and exercises of its nuclear forces are aimed at intimidating its neighbours,” adding that this was, “Undermining trust and stability in Europe.”<sup>40</sup>

While the U.S. Department of Defense now recognizes the threat posed by Russia, seemingly little has been done to bring Russia back into compliance with the INF Treaty

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<sup>38</sup> Robert Work and James Winnefeld, “Prepared Statement” *House Armed Services Committee*, 114th Congress, June 25, 2015, p. 4, available at <http://docs.house.gov/meetings/AS/AS00/20150625/03669/HHRG-114-AS00-Wstate-WorkR-20150625.pdf>.

<sup>39</sup> Robert Scher, “Prepared Statement,” *House Armed Services Committee*, 114th Congress, March 2, 2016, p. 3, available at <http://docs.house.gov/meetings/AS/AS29/20160302/104619/HHRG-114-AS29-Wstate-ScherR-20160302.pdf>.

and there is no apparent concern about prospective Russian noncompliance with New START. U.S. nuclear modernization programs are the same as they were in 2010-2011 when the Obama Administration was in apparent denial that Russia represented a nuclear threat to the U.S. Indeed, in the FY 2017 budget request, two important nuclear modernization programs have been slowed.<sup>41</sup> Perhaps, this is also playing with fire.

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<sup>40</sup> "Speech by NATO Secretary General Jens Stoltenberg at the Munich Security Conference," *NATO*, February 13, 2016, available at [http://www.nato.int/cps/en/natohq/opinions\\_128047.htm](http://www.nato.int/cps/en/natohq/opinions_128047.htm).

<sup>41</sup> "McCain's 'dear colleague' letter on defense spending caps," *Inside Defense*, May 20, 2016, available at <https://insidedefense.com/document/mccains-dear-colleague-letter-defense-spending-caps>.

## The Russian Nuclear Weapons Buildup and the Future of the New START Treaty \*

On October 1, 2016 the Department of State released the most recent Russian and U.S. data on their strategic nuclear forces provided in accordance with the New START Treaty. The data indicate that five and a half years into the New START Treaty's seven year reduction period, the number of accountable deployed Russian strategic nuclear warheads has further increased to 1,796, well above the New START ceiling of 1,550, which goes into effect in February 2018.<sup>1</sup> On the other hand, accountable, deployed U.S. strategic nuclear warheads have declined from 1,800 at New START Treaty entry into force (EIF) in early 2011, to 1,367, well below the New START limit.<sup>2</sup>

Compliance with New START should have been easy for Russia. At New START EIF, it had 1,537 strategic nuclear warheads, below the New START limit of 1,550, 521 deployed delivery vehicles, well below the New START limit of 700, and 865 deployed and non-deployed delivery vehicles, just above the New START limit of 800.<sup>3</sup> The excess Russian non-deployed delivery vehicles were mainly items that were accountable but not operational and, hence, their elimination should not have been painful. For

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\* Original publication: Mark B. Schneider, "The Russian Nuclear Weapons Buildup and the Future of the New START Treaty," *Information Series*, No. 414 (Fairfax, VA: National Institute Press, October 27, 2016).

<sup>1</sup> U.S. Department of State, "New START Treaty Aggregate Numbers of Strategic Offensive Arms," *U.S. Department of State*, October 1, 2016, available at <http://www.state.gov/t/avc/rls/2016/255377.htm>.

<sup>2</sup> Ibid.: Russian Ministry of Foreign Affairs, "New START Treaty Aggregate Numbers of Russian and US Strategic Offensive Arms (Fact Sheet)," *Russian Ministry of Foreign Affairs*, June 27, 2011, available at [http://www.mid.ru/brp\\_4.nsf/0/55016EBF869728C1C32578BD0058B349](http://www.mid.ru/brp_4.nsf/0/55016EBF869728C1C32578BD0058B349).

<sup>3</sup> "New START Treaty Aggregate Numbers of Russian and US Strategic Offensive Arms (Fact Sheet)," June 27, 2011, op. cit.

example, by 1999, only one of the five Russian Typhoon class missile submarines was reportedly operational, and this was just as a test platform for the new Bulava-30 SLBM program.<sup>4</sup> The U.S. would have paid for the elimination of these submarines under the Comprehensive Threat Reduction (CTR) program if Russia had wanted it to do so.

As a result of the buildup of its strategic offensive forces, however, Russia is now 246 warheads above the New START Treaty limit on deployed warheads.<sup>5</sup> It now appears unlikely that Russia intends to comply with the New START Treaty ceilings in early 2018 when they come into legal effect. Announced ongoing Russian strategic nuclear modernization programs will substantially increase the number of deployed strategic nuclear weapons that would have to be removed from accountability by February 2018. According to Bill Gertz, an Obama Administration official told him, "The Russians are doubling their [nuclear] warhead output," and, "They will be exceeding the New START [arms treaty] levels because of MIRVing these new systems."<sup>6</sup> This appears to be substantiated by the latest Russian data on their deployed warhead numbers. There are no announced Russian force reduction programs that would put Russian forces in compliance with the 2018 New START limits and time is growing very short.

A dissenting view is voiced by Hans M. Kristensen of the Federation of American Scientists. According to Kristensen, "Rather than a nuclear build-up, however, the

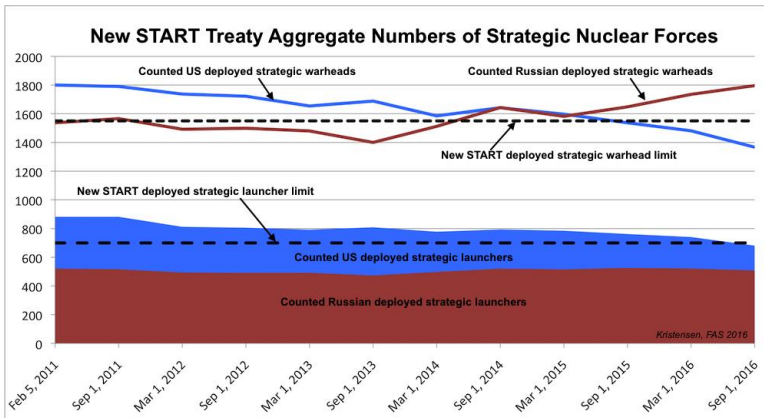
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<sup>4</sup> "941 TYPHOON," Federation of American Scientists, August 25, 2000, available at <https://fas.org/nuke/guide/russia/slbm/941.htm>.

<sup>5</sup> "New START Treaty Aggregate Numbers of Strategic Offensive Arms," October 1, 2016, op. cit.: Bill Gertz, "Russia Adds Hundreds of Warheads Under Nuclear Treaty," *The Washington Free Beacon*, October 4, 2016, available at <http://freebeacon.com/national-security/russia-adds-hundreds-warheads-nuclear-treaty/>.

<sup>6</sup> Bill Gertz, "Russia Doubling Nuclear Warheads," *The Washington Free Beacon*, April 1, 2016, available at <http://freebeacon.com/national-security/russia-doubling-nuclear-warheads/>.

increase is a temporary fluctuation caused by introduction of new types of launchers that will be followed by retirement of older launchers before 2018. Russia's compliance with the treaty is not in doubt."<sup>7</sup> However, Kristensen's claim that Russia intends to comply with New START is, at best, problematical. Unfortunately, the fact is that Russian warhead growth is a trend, not a routine fluctuation. This is well illustrated by the following chart from a recent blog by Kristensen.<sup>8</sup>



Russia has consistently been above the New START warhead level since mid-2014 while deployed U.S. warheads have significantly declined. The Russian warhead numbers reflect the deployment of both new heavily MIRVed ICBMs and SLBMs without compensating reductions in older forces. In 2012, the Obama Administration predicted that Russia would deploy "several substantially MIRVed new strategic missiles..."<sup>9</sup> It

<sup>7</sup> Hans M. Kristensen, "New START Data Shows Russian Warhead Increase Before Expected Decrease," The Federation of American Scientists, October 3, 2016, available at <https://fas.org/blogs/security/2016/10/new-start-data-2016/>.

<sup>8</sup> Ibid.

<sup>9</sup> Madelyn Creedon, Assistant Secretary of Defense for Global Strategic Affairs, Statement before the Senate Foreign Relations Committee, June 21, 2012,

did not, however, predict that Russian forces would grow. Indeed, measured against the declared Russian number of 1,400 deployed strategic nuclear warheads in mid-2014, the Russian force has increased over 28%.<sup>10</sup> In the same period, U.S. deployed strategic nuclear warheads declined from 1,688 to 1,367, a decline of 19%.

Concerning deployed delivery and non-deployed delivery vehicles, Kristensen states, "Russia and the United States continue to reduce the overall size of their strategic nuclear forces."<sup>11</sup> This is certainly true for the U.S., but it is not true for Russia as is illustrated by Kristensen's own chart. There has been little change in the Russian number of deployed delivery vehicles since New START EIF. He does not describe what he believes Russia will do in order to comply with the deployed warhead limit of New START in the limited remaining time for Treaty compliant reductions. Regarding Russian elimination of delivery vehicles, Mr. Kristensen says, "Russia will have to dismantle another 47 launchers to meet the limit of 800 deployed and non-deployed launchers by February 2018. Those launchers will likely come from [the] retirement of the remaining Delta III SSBNs, retirement of additional Soviet-era ICBMs, and destruction of empty excess ICBM silos."<sup>12</sup> But, there are no announced Russian programs to do any of this. The closer the Russians get to the deadline without action, the less palatable their options will be. Submarine ballistic missile launchers are not removed from accountability by "retiring" them. Under the New START

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available at [http://www.foreign.senate.gov/imo/media/doc/Madelyn\\_Creedon\\_Testimony.pdf](http://www.foreign.senate.gov/imo/media/doc/Madelyn_Creedon_Testimony.pdf).

<sup>10</sup> U.S. Department of State, "New START Treaty Aggregate Numbers of Strategic Offensive Arms," *U.S. Department of State*, October 1, 2013, available at <http://www.state.gov/t/avc/rls/215000.htm>.

<sup>11</sup> Kristensen, "New START Data Shows Russian Warhead Increase Before Expected Decrease," *op. cit.*

<sup>12</sup> *Ibid.*

Treaty, the process involves “...removing all missile launch tube hatches, their associated superstructure fairings, and, if applicable, gas generators.”<sup>13</sup> There is also a time consuming verification provision that requires the display of the submarine for 60 days.<sup>14</sup>

It is unlikely that Russia will decide to eliminate the Delta III force anytime soon: one of them reportedly has just been put through an expensive overhaul process, and Russia launched an SS-N-18 SLBM from a Delta III submarine during an unannounced large strategic nuclear exercise in October 2016.<sup>15</sup> Eliminating the Delta III submarines would reduce the Russian Pacific Fleet to two ballistic missile submarines,<sup>16</sup> something Russia would likely want to avoid. Moreover, it is impossible to compensate even for the current overage of 246 deployed strategic nuclear warheads (much less the additional warheads Russia will deploy by February 2018) by removing warheads from Delta III submarines – there simply are not enough of them. Pavel Podvig, a Russian expatriate who probably does the best current order of battle assessments for Russian strategic nuclear forces, says that Russia has three operational Delta III submarines.<sup>17</sup> A 2016 article by Hans Kristensen and Robert Norris credits

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<sup>13</sup> U.S. Department of State, New START Treaty, Protocol, Part Four, Section 4, paragraph 1, available at <http://www.state.gov/documents/organization/140047.pdf>.

<sup>14</sup> *Ibid.*, paragraph 3 and 4.

<sup>15</sup> Pavel Podvig, “Project 667BDR/Delta III submarines are alive and well,” *Russianforces.org*, August 12, 2016, available at [http://russianforces.org/blog/2016/08/project\\_667bdrdelta\\_iii\\_submar.shtml](http://russianforces.org/blog/2016/08/project_667bdrdelta_iii_submar.shtml).: Pavel Podvig, “Three ballistic missiles launched in one day,” *Russianforces.org*, October 12, 2016, available at [http://russianforces.org/blog/2016/10/three\\_ballistic\\_missiles\\_launc.shtml](http://russianforces.org/blog/2016/10/three_ballistic_missiles_launc.shtml).

<sup>16</sup> Pavel Podvig, “Vladimir Monomakh arrived in Vilyuchinsk,” September 26, 2016, available at [http://russianforces.org/blog/2016/09/vladimir\\_monomakh\\_arrived\\_in\\_v.shtml](http://russianforces.org/blog/2016/09/vladimir_monomakh_arrived_in_v.shtml).

<sup>17</sup> Podvig, “Project 667BDR/Delta III submarines are alive and well,” *op. cit.*

them with two.<sup>18</sup> Yet, it would take over five Delta IIIs to compensate for 246 warheads currently over the New START ceiling. Announced Russian strategic nuclear modernization programs suggest that Russia would have to compensate for about 100 *additional* warheads by February 2018.<sup>19</sup> To be in compliance with New START by disarming Delta III submarines would require over seven active submarines to be disarmed. Thus, a route to Russian New START compliance through Delta III disarming is not possible.

Kristensen's assertion that Russia's nuclear warhead advantage is going to be temporary is unlikely to be true regardless of what Moscow plans to do with regard to New START Treaty compliance. The Russian advantage in deployed strategic nuclear warheads is probably larger than the New START numbers suggest because New START accounting does not fully reflect Russian enhancements of its heavy bomber capability. Under New START, a bomber load of weapons is counted as a single warhead irrespective of how many warheads it actually carries. Indeed, in 2010, Hans Kristensen told *The New York Times* that the bomber weapon counting rule was "totally nuts" because it "frees up a large pool of warhead spaces under the treaty limit that enable each country to deploy many more warheads than would otherwise be the case..."<sup>20</sup> *RIA Novosti*, a Russian government news agency, reported, "Under the Treaty, one

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<sup>18</sup> Hans M. Kristensen & Robert S. Norris, "Russian nuclear forces, 2016," *Bulletin of the Atomic Scientists*, Vol. 72, No. 3, April 16, 2016, p. 226, available at <http://www.tandfonline.com/doi/pdf/10.1080/00963402.2016.1170359>.

<sup>19</sup> Mark Schneider, "Russia's Growing Strategic Nuclear Forces and New START Treaty Compliance," Information Series, No. 407 (Fairfax, VA: National Institute Press, June 21, 2016), p. 2, available at <http://www.nipp.org/2016/06/21/schneider-mark-russias-growing-strategic-nuclear-forces-and-new-start-treaty-compliance/>.

<sup>20</sup> Peter Baker, "Arms Control May Be Different on Paper and on the Ground," *The New York Times*, March 30, 2010, available at <http://www.nytimes.com/2010/03/31/world/europe/31start.html>.

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nuclear warhead will be counted for each deployed heavy bomber *which can carry 12-24 missiles or bombs*, depending on its type.”<sup>21</sup> The 2016 article by Kristensen and Norris cited above states that Russia now has about 2,600 real deployed strategic nuclear warheads.<sup>22</sup> Assuming the Obama Administration has not increased the number of nuclear weapons at our heavy bomber bases from the 2011 level, the U.S. probably has about 1,550 deployed missile and bomber strategic nuclear weapons today.<sup>23</sup> This suggests a real Russian advantage of approximately 1,000 deployed warheads – hardly a passing blip.

Kristensen also claims that both the U.S. and Russia have the same number of nuclear warheads – 4,500. He cites no source for the Russian number and it is extremely unlikely that the Russian nuclear stockpile is this small. Russia has more deployed strategic nuclear warheads than the United States and ten times the number of tactical

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<sup>21</sup> Ilya Kramnuk, “New START Treaty based on Mutual Russian–U.S. Concessions,” *RIA Novosti*, April 12, 2010, available at <http://en.rian.ru/analysis/20100409/158499862.html>. (Emphasis added).

<sup>22</sup> Kristensen & Norris, “Russian nuclear forces, 2016,” *op. cit.*, p. 126.

<sup>23</sup> While the Obama administration has not announced the number of nuclear weapons deployed at heavy bomber bases, two 2011 reports of the Obama administration indicate that there were about 250 nuclear warheads at these bases on the last day of the 2002 Moscow Treaty (superseded by New START) and the first day of New START. There is no indication that the Obama administration has increased nuclear bomber capability. The two reports indicate the number of nuclear warheads accountable under the 2002 Moscow Treaty and the New START Treaty on the same day, the first day of New START and last day of the Moscow Treaty. Taking into account the difference in the counting rules for bomber weapons, it is possible to calculate the number of deployed weapons at about 250. If you add 250 to the just released number for U.S. weapons accountable weapons on New START and subtract the about 70 weapons for bombers that are already counted in the New START data, the number is about 1,550. See “2011 Annual Report on Implementation of the Moscow Treaty,” Washington, D.C.: U.S. Department of State, June 2, 2011, available at <http://www.state.gov/t/avc/rls/rpt/164828.htm>: “New START Treaty Aggregate Numbers of Strategic Offensive Arms,” Washington, D.C.: U.S. Department of State, October 25, 2011, available at <http://www.state.gov/t/avc/rls/176096.htm>.

nuclear weapons.<sup>24</sup> The Obama Administration has described the difference in tactical nuclear weapons as “hundreds” vs. “thousands.”<sup>25</sup> In 2009, the main official Russian news agency *ITAR TASS* (now called *TASS*) reported that Russia “probably” had between 15,000 to 17,000 nuclear weapons.<sup>26</sup> The estimate of Hans Kristensen and Robert Norris for 2009 is about half this number.<sup>27</sup> In November 2011, the Obama Administration estimated Russia had 4,000-6,500 nuclear weapons.<sup>28</sup> The U.S. nuclear weapons number Kristensen is using is from the Obama Administration, but it does not distinguish between active and inactive weapons, which is a significant difference. Thus, Kristensen’s comparison is, at best, misleading because he compares a U.S. number which includes active and inactive weapons to a dubious Russian number which apparently counts only active Russian weapons. Kristensen appears to ignore the fact that Russia has maintained a large and fully functional nuclear weapons complex reportedly

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<sup>24</sup> “Thornberry on Alarming Developments with New START Treaty,” House Armed Services Committee, October 4, 2016, available at <https://armedservices.house.gov/news/press-releases/thornberry-alarming-developments-new-start-treaty>.

<sup>25</sup> “Obama Advisor Gary Samore, ‘The Ball Is Very Much in Tehran’s Court,’” *Radio Free Europe*, April 14, 2011, available at [http://www.rferi.org/content\\_interview\\_samore\\_Russia\\_Iran\\_us\\_poicy/31557326.html](http://www.rferi.org/content_interview_samore_Russia_Iran_us_poicy/31557326.html).

<sup>26</sup> “New RF-US agt to replace START to be concluded before year end – FM,” *ITAR-TASS*, March 9, 2009, available at <http://www.itar-tass.com/eng/level2.html?NewsID=14295189&PageNum=1>.

<sup>27</sup> Hans M. Kristensen and Robert S. Norris, “Status of World Nuclear Forces,” Federation of American Scientists (No date but 2015), available at <https://fas.org/issues/nuclear-weapons/status-world-nuclear-forces/>.

<sup>28</sup> “James N. Miller, Principal Deputy Under Secretary of Defense for Policy, Statement before the House Committee on Armed Services, November 2, 2011,” available at [http://armedservices.house.gov/index.cfm/files/serve?File\\_id=faad05df-9016-42c5-86bc-b83144c635c9](http://armedservices.house.gov/index.cfm/files/serve?File_id=faad05df-9016-42c5-86bc-b83144c635c9).

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capable of producing 2,000 weapons per year, while we have not.<sup>29</sup>

Russia is unlikely to make maximum use of the remaining time for reductions to meet New START ceilings. Instead, it appears to be planning for a major confrontation with the United States over Eastern Europe, economic sanctions imposed upon them over their aggression in Ukraine, and the deployment of missile defenses in Europe. There is a great deal of talk in the Russian State media concerning an imminent nuclear war with the West.<sup>30</sup> Pavel Felgenhauer, a distinguished Russian journalist, has suggested that the Russian military is fanning tensions to protect the Russian military budget from cuts. He writes, "The most effective way to secure greater budgetary allocations, therefore, is to amplify tensions with the US and make all-out war a distinct possibility."<sup>31</sup> Another distinguished Russian journalist, Alexander Golts, has sarcastically observed, "We have just one need now, dear fellow citizens - how to prepare in the best possible way for the war that, if we analyse the actions of our own chiefs, is

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<sup>29</sup> Robert Joseph, "Second to One," *National Review*, October 17, 2011, available at [http://russianforces.org/blog/2007/05/how\\_many\\_warheads.shtml](http://russianforces.org/blog/2007/05/how_many_warheads.shtml).

<sup>30</sup> "US-Russian row over Syria potentially leads to war - daily," *BBC Monitoring Former Soviet Union*, October 6, 2016, available at <http://search.proquest.com/professional/login>.; Fraser Moore, "Putin Wants War: NATO jets from four countries intercept Russian nuclear planes off Europe," *London Express Online*, October 6, 2016, available at <http://dialog.proquest.com/professional/login>.; Lucinda Hannah, "Russia rails against the West and moves missiles to Baltic," *London Times*, October 10, 2016, available at <http://dialog.proquest.com/professional/login>.; "State TV, Duma brass hat keep pace with 'war' rhetoric," *BBC Monitoring Former Soviet Union*, October 16, 2016, available at <http://dialog.proquest.com/professional/login>.; "West is bent on nuclear war, Russia tells people," *London Times*, October 3, 2016, available at <http://dialog.proquest.com/professional/login>.

<sup>31</sup> Pavel Felgenhauer, "Budgetary Fight in Moscow Sends US-Russian Relations Into Deep Crisis," *Eurasia Daily Monitor*, Vol. 13 No. 161 (October 6, 2016), available at <https://jamestown.org/program/budgetary-fight-moscow-sends-us-russian-relations-deep-crisis/>.

on the point of breaking out.”<sup>32</sup> Both noted the ominous implications of recent reported Russian nuclear civil defense actions.

According to Russian U.N. Ambassador Vitaly Churkin, U.S.-Russian relations are at the worst point since the 1973 Middle East crisis.<sup>33</sup> This crisis involved a serious risk of military action by the Soviet Union and the U.S. “responded by putting its nuclear forces on worldwide alert...”<sup>34</sup> If Russia is planning for a confrontation with the next U.S. President, it certainly will not reduce its strategic nuclear forces anytime soon. Nuclear threats of many types will be a major part of Russian pressure on the U.S. to accept Russian domination of Eastern Europe and to withdraw missile defense from Europe.

There is precedent for Russian expressions of hostility following U.S. elections. The day after the U.S. election in 2008, then-President Dmitry Medvedev made nuclear related threats in a speech before the Russian Duma. He stated that in response to U.S. deployment of missile defense in Europe:

For example, we had planned to decommission three missile regiments of a missile division deployed in Kozelsk from combat readiness and to disband the division by 2010. I have decided to abstain from these plans. Nothing will disband. Moreover, we will deploy the Iskander missile system in the Kaliningrad Region to be able, if

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<sup>32</sup> Alexander Golts, “We will defend al-Asad at any cost,” *BBC Monitoring Former Soviet Union*, October 13, 2016, available at <http://dialog.proquest.com/professional/login>.

<sup>33</sup> Edith M. Lederer, “Russia envoy: Tensions with US are probably worst since 1973,” *Associated Press*, October 15, 2016, available at <http://abcnews.go.com/US/wireStory/russia-envoy-tensions-us-worst-1973-42822802>.

<sup>34</sup> Office of the Historian, “Milestones: 1969–1976 The 1973 Arab-Israeli War” (Washington, D.C.: U.S. Department of State, no date), available at <https://history.state.gov/milestones/1969-1976/arab-israeli-war-1973>.

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necessary, to neutralise the missile defence system. Naturally, we envisage using the resources of the Russian Navy for these purposes as well.<sup>35</sup>

In 2008, Russia represented a more modest threat to the West than it now does. Today, Russia has much more extensive nuclear modernization programs underway than in 2008. Typical Russian nuclear threats involve the targeting of nuclear missiles and the threat of preemptive nuclear strikes.<sup>36</sup> One of the most explicit threats was made in 2015 when the Russian Ambassador to Denmark declared, “I don’t think that Danes fully understand the consequence if Denmark joins the American-led missile defence shield. If they do, then Danish warships will be targets for Russian nuclear missiles.”<sup>37</sup> Russian nuclear threats may be less restrained after the U.S. election. The deployment of Russian nuclear capable Iskander missiles to Kaliningrad has already happened. Just before the October 2016 Russian exercise in Kaliningrad involving nuclear capable Iskander missiles, TASS reported the Iskander would “deliver a simulated preemptive strike against the missile systems and other remote critical targets of a simulated enemy.”<sup>38</sup> Lithuanian Foreign Minister Linas

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<sup>35</sup> President of Russia Dmitry Medvedev, “Address to the Federal Assembly of the Russian Federation,” *The Kremlin.ru*, November 5, 2008, available at [http://www.kremlin.ru/eng/speeches/2008/11/05/2144\\_type70029\\_type82917type127286\\_208836.shtml](http://www.kremlin.ru/eng/speeches/2008/11/05/2144_type70029_type82917type127286_208836.shtml).

<sup>36</sup> “Testimony Prepared By: Dr. Keith B. Payne Professor and Head, Graduate Department of Defense and Strategic Studies Missouri State University Commissioner, Congressional Strategic Posture Commission,” *Senate Appropriations Subcommittee on Energy and Water Development*, 113th Congress, July 25, 2012, available at <http://www.nipp.org/wp-content/uploads/2014/12/July-25-testimony-for-web.pdf>.

<sup>37</sup> Julian Isherwood, “Russia warns Denmark its warships could become nuclear targets,” *Telegraph.com*, March 21, 2015, available at <http://www.telegraph.co.uk/news/worldnews/europe/denmark/11487509/Russia-warns-Denmark-its-warships->.

<sup>38</sup> “Iskander missile brigade on alert for drill in western Russia,” TASS, October 4, 2016, available at <http://tass.com/defense/903968>.

Linkevicius said this deployment involved an improved version of the Iskander with a range of 700-km, which also raises the issue of compliance with the INF Treaty.<sup>39</sup> He indicated the purpose of this was to “seek concessions from the West.”<sup>40</sup>

Russia is well aware that there has been no apparent U.S. response to their INF Treaty violations. Absent a major change in policy, there would likely be little or no serious U.S. response to Russian “suspension” of its obligations under the New START Treaty. Russia has little to lose if it initiates a post-election nuclear crisis, assuming of course it does not get out of hand—which is apparently what Russian leaders believe. Putin is a risk taker. In the 1990s, as Secretary of the Russian National Security Council, he developed Russia’s doctrine of nuclear first use during conventional warfare.<sup>41</sup> In September 2016, Secretary of Defense Ashton Carter pointed out the danger that Russia may resort to “to smaller but still unprecedentedly terrible attacks...to try to coerce a conventionally superior opponent to back off or abandon an ally during a crisis.”<sup>42</sup> Hopefully, the likely Putin’s post-election provocation will not go beyond words. However, wishful thinking is not an

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<sup>39</sup> “Russia deploys Iskander-M missile systems on western border,” *ParsToday*, October 9, 2016, available at [http://parstoday.com/en/news/world-i29662-russia\\_deploys\\_iskander\\_m\\_missile\\_systems\\_on\\_western\\_border](http://parstoday.com/en/news/world-i29662-russia_deploys_iskander_m_missile_systems_on_western_border).

<sup>40</sup> “Russia deploys nuclear-capable missiles on NATO doorstep,” *AFP*, October 9, 2016, available at <http://www.military.com/daily-news/2016/10/09/russia-deploys-nuclear-capable-missiles-nato-doorstep.html>

<sup>41</sup> Mark Schneider, *The Nuclear Forces and Doctrine of the Russian Federation* (Fairfax, VA: National Institute Press, 2006), p. 20, <http://www.nipp.org/wp-content/uploads/2014/12/Russian-nuclear-doctrine-NSF-for-print.pdf>.

<sup>42</sup> “Remarks by Secretary Carter to troops at Minot Air Force Base, North Dakota,” September 26, 2016, available at <http://www.defense.gov/News/Transcripts/Transcript-View/Article/957408/remarks-by-secretary-carter-to-troops-at-kirtland-afb-new-mexico>.

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effective deterrence policy. We need to enhance our deterrence posture promptly to minimize the chance of a major Russian miscalculation.



# Russian INF Treaty Violations: Implications for the Nuclear Posture Review and the Future of the INF Treaty \*

In 2014, the Obama Administration determined, "...that the Russian Federation was 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."<sup>1</sup> However, it never revealed which missile was in violation of the Treaty. Soon after the Obama Administration left office, Michael Gordon, writing in the *New York Times*, reported that Russia had actually deployed the prohibited cruise missile.<sup>2</sup> This story was soon confirmed by the Trump Administration, but the precise missile involved was still not revealed.<sup>3</sup> In June 2017, an unclassified intelligence report by the National Air and Space Intelligence Center, U.S. Air Force (NASIC), indicated that Russia had deployed the 3M14, a ground-, sea- and

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<sup>1</sup> U.S. Department of State, *Adherence to and Compliance with Arms Control, Nonproliferation, and Disarmament Agreements and Commitments* (Washington, D.C.: Department of State, July 2014), p. 8, available at <http://www.state.gov/documents/organization/230108.pdf>.

<sup>2</sup> Michael R. Gordon, "Russia Deploys Missile, Violating Treaty and Challenging Trump," *The New York Times*, February 14, 2017, available at <https://www.nytimes.com/2017/02/14/world/europe/russia-cruise-missile-arms-control-treaty.html>.

<sup>3</sup> ADM Harry B. Harris, Jr., "WEST 2017 Keynote: 'The View from the Indo-Asia-Pacific,'" *PACOM.mil*, February 22, 2017, available at <http://www.pacom.mil/Media/Speeches-Testimony/Article/1089966/west-2017-keynote-the-view-from-the-indo-asia-pacific/>; Steve Holland, "Trump wants to make sure U.S. nuclear arsenal at 'top of the pack,'" *Reuters*, February 24, 2017, available at <http://www.reuters.com/article/us-usa-trump-exclusive-idUSKBN1622IF>.

submarine-launched cruise missile with a range of 2,500-km.<sup>4</sup> The 3M-14 is the Russian Kalibr cruise missile.<sup>5</sup> The military implications of the deployment of the Kalibr should be a significant issue in the Nuclear Posture Review (NPR).

The impressive capabilities of the Kalibr missile were demonstrated in Russian attacks in Syria which the Russian Defense Ministry said displayed an accuracy that “did not exceed three meters [miss distance].”<sup>6</sup> The Russian press has long reported a Kalibr range of 2,500-km and President Vladimir Putin declared this missile “can be equipped either with conventional or special nuclear warheads.”<sup>7</sup> The June 2017 report of the Defense Intelligence Agency (DIA) on *Russia Military Power* noted, “The KALIBR-family of cruise missiles are some of Russia’s most capable systems,” have a “lower flight profile than other Russian cruise missile systems” [hence, enhancing its ability to penetrate air defenses], and are “capable of carrying conventional or nuclear warheads.”<sup>8</sup> It also said, “With the arrival of two

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<sup>4</sup> Defense Intelligence Ballistic Missile Analysis Committee, National Air and Space Intelligence Center, *Ballistic and Cruise Missile Threat*, NASIC-1031-0985-2017 (Wright-Patterson Air Force Base Oh: National Air and Space Intelligence Center, June 2017), p. 37, available at <https://fas.org/wp-content/uploads/media/NASIC2017.pdf>.

<sup>5</sup> CSIS, “SS-N-30A (Kalibr),” (Washington, D.C.: Center for Strategic and International Studies, August 11, 2016,) available at <https://missilethreat.csis.org/missile/ss-n-30a/>; Office of Naval Intelligence, *The Russian Navy* (Washington, D.C.: Office of Naval Intelligence, December 2015), p. 35, available at <http://www.oni.navy.mil/Portals/12/Intel%20agencies/russia/Russia%202015print.pdf?ver=2015-12-14-082038-923>.

<sup>6</sup> “Russia agreed with partners in advance on cruise missile strikes on IS militants in Syria,” *TASS.ru*, October 7, 2015, available at <http://tass.ru/en/defense/8269675> Russia agreed with partners in advance on cruise missile strikes on IS militants in Syria.

<sup>7</sup> “Meeting with Defence Minister Sergei Shoigu,” *Kremlin.ru*, December 8, 2015, available at <http://en.Kremlin.ru/events/president/news/50892>.

<sup>8</sup> U.S. Defense Intelligence Agency, *Russia Military Power: Building a Military to Support Great Power Aspirations* (Washington, D.C.: Defense Intelligence Agency, 2017), p. 78, available at <http://www.dia.mil/Portals/>

KALIBR-equipped vessels in 2016, the Russian Baltic fleet presents a significant long-range precision conventional and theater nuclear strike threat to Western Europe.”<sup>9</sup> It is noteworthy that Russia’s Defense Minister General of the Army Sergei Shoigu announced that in the second quarter of 2017 some 60 Kalibr missiles were delivered to the troops.<sup>10</sup> This number is apparently unprecedented and almost certainly fuels the prohibited deployment.

The ground-launched Kalibr missile will allow Russia to deploy large numbers of Kalibr missiles economically, dramatically increasing the threat to Europe and Asia. It no longer requires building expensive corvettes, frigates and destroyers to deploy Kalibrs legally because the typical launcher for a ground-launched cruise missile is a small military truck. Even the \$70-million dollar Bunyon-M class corvettes,<sup>11</sup> (designed to be an inexpensive Kalibr platform) which launched the first Kalibr attacks in Syria, are vastly more expensive than a few small military trucks and their supporting vehicles. Moreover, in July 2017, state-run *Sputnik News* reported that Russia’s hypersonic cruise missile the Zircon, now being tested at speeds up to Mach 8, “can be fired from the same launchers as the cruise missiles Kalibr and the anti-ship missile Oniks...”<sup>12</sup> *Sputnik News* later reported that the Zircon “is designed for speeds

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27/Documents/News/Military%20Power%20Publications/Russia%20Military%20Power%20Report%202017.pdf.

<sup>9</sup> *Ibid.*, p. 68.

<sup>10</sup> “Minister of Defence of the Russian Federation General of the Army Sergei Shoigu held the Single day of military production acceptance,” *Russian Ministry of Defense*, July 26, 2017, available at [http://eng.mil.ru/en/news\\_page/country/more.htm?id=12134754@egNews](http://eng.mil.ru/en/news_page/country/more.htm?id=12134754@egNews).

<sup>11</sup> Project 21631,” *Deagel.com*, July 19, 2017, available at [http://www.deagel.com/Fighting-Ships/Project-21631\\_a002256002.aspx](http://www.deagel.com/Fighting-Ships/Project-21631_a002256002.aspx).

<sup>12</sup> “Hypersonic Shield: Why Russia’s Zircon Missile Could Be a Game Changer,” *Sputnik News*, July 17, 2017, available at <https://sputniknews.com/military/201707171055619054-russia-zircon-missile-development/>.

of up to 12 times the speed of sound.”<sup>13</sup> If so, its flight time-to-target would be comparable to ballistic missiles and it would be much less detectable and difficult to intercept.

The Oniks is a supersonic anti-ship/land-attack cruise missile, which is ground-launched by the Bastion system. According to the DIA report on *Russia Military Power*, the TSIRKON (Zircon), “is expected to enter service in 2018, [and] will have a 500 to 1,000-km range.”<sup>14</sup> (This matches reports in the Russian state media that its range may be 1,000-km.<sup>15</sup>) The NASIC report says it is possibly nuclear capable.<sup>16</sup> Since its range is entirely within the INF Treaty prohibited zone, if the Zircon were launched from the ground-mobile launchers of the Kalibr, the Bastion or any other ground-mobile launcher it would be another serious violation of the INF Treaty. The Zircon could be an augmentation of the Kalibr and a potentially much more capable replacement for the Oniks in the Bastion system. Prohibited ground-launched deployment of the Zircon is a real possibility.

There are apparently more Russian violations of the INF Treaty than just the prohibited Kalibr production, testing and deployment. In July 2016, *Interfax*, Russia’s main unofficial news agency, reported, “The Bastion coastal defense system has an operational range of 600 kilometers and can be used against surface ships of varying class and

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<sup>13</sup> “Russia Achieves ‘Considerable’ Success in Hypersonic Arms Development,” *Sputnik News*, July 28, 2018, available at <https://sputniknews.com/russia/201707281055954607-russia-hypersonic-weapons/>.

<sup>14</sup> U.S. Defense Intelligence Agency, *Russia Military Power: Building a Military to Support Great Power Aspirations*, op. cit., p. 79.

<sup>15</sup> “Russian Navy to have nigh-unstoppable hypersonic missiles by 2018 – report,” *RT*, April 20, 2016, available at <https://www.rt.com/news/340397-russian-army-goes-hypersonic/>.

<sup>16</sup> National Air and Space Intelligence Center, *Ballistic and Cruise Missile Threat*, op. cit., p. 37.

type...<sup>17</sup> (The INF Treaty accountable range of the Bastion is almost certainly larger than the operational range because range for cruise missiles is calculated assuming fuel exhaustion.<sup>18</sup>) There are other press reports that the Bastion has a range of 600-1,000-km.<sup>19</sup> The Bastion has been used against ground targets in Syria.<sup>20</sup> If Russia is already violating the INF Treaty, they will hardly hesitate to upgrade the capabilities of the Bastion system.

There is another Russian ground-launched cruise missile, the R-500, part of the Iskander system, which is widely reported to have a range that is prohibited by the INF Treaty. In November 2007, *Ria Novosti*, an official Russian Government news agency, reported, "The flight range of a new cruise missile adapted for Iskander and successfully tested in May 2007 could exceed 500 km (310

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<sup>17</sup> "Russian Navy to get 5 coastal defense missile systems by end of 2016 - source (Part 2)," *Interfax*, July 22, 2016, available at <http://www.dialog.com/proquestdialog/>.

<sup>18</sup> "Intermediate-Range and Shorter-Range Nuclear Forces (INF) Treaty: Table of Contents," Article VII, paragraph 4, available at <http://www.acq.osd.mil/tc/treaties/inf/index.htm>.

<sup>19</sup> "Bastion-P Coastal defense missile system," *MilitaryToday.com*, no date, available at [http://www.military-today.com/missiles/bastion\\_p.htm](http://www.military-today.com/missiles/bastion_p.htm).; Franz-Stefan Gady, "Russia's New Stealth Frigate to Be Commissioned in November 2017," *The Diplomat*, May 17, 2017, available at <http://thediplomat.com/2017/05/russias-new-stealth-frigate-to-be-commissioned-in-november-2017/>.; Sergey Sukhankin, "Russia Claims Hypersonic Missile Test," *The Jamestown Institute*, May 2, 2017, available at [http://www.realcleardefense.com/articles/2017/05/02/russia\\_claims\\_hypersonic\\_missile\\_test\\_111284.html](http://www.realcleardefense.com/articles/2017/05/02/russia_claims_hypersonic_missile_test_111284.html).; "Alexei Ramm, "Med Forces': 'Russia is strengthening the Baltic grouping: Bal, Bastion, and Kalibr missile complexes will secure the country's northwestern region'," *Izvestia*, October 26, 2013, available at <http://www.dialog.com/proquestdialog/>.

<sup>20</sup> Nicholas de Larrinaga, Sean O'Connor, and Neil Gibson, "Russia reveals Bastion-P deployment, land attack role in Syria," *IHS Jane's Defence Weekly*, November 16, 2016, available at <http://www.janes.com/article/65517/russia-reveals-bastion-p-deployment-land-attack-role-in-syria>.

miles)."<sup>21</sup> In November 2008, it revealed that the potential range of the R-500 "can exceed 2,000 kilometers..."<sup>22</sup> *Kommersant*, a major Russian publication, maintained that the range of the R-500 "can amount to 1,000 kilometers."<sup>23</sup> Writing in *Ria Novosti* and for the *UPI*, Russian journalist Ilya Kramnik said that the range of the R-500, and possibly a second missile type, could be between 1,200 and 3,000-km.<sup>24</sup> In 2014, noted Russian journalist Pavel Felgenhauer "said the missile (R-500) has been tested at a range of 1,000 km," but the "range could be extended up to 2,000-3,000 km by adding extra fuel tanks."<sup>25</sup>

These reports are quite credible because the R-500 is much too big to have a range of under 500-km. When it was first launched in 2007, then-Defense Minister Sergei Ivanov stated, "It can be used at long range with surgical precision,

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<sup>21</sup> "Russia to compensate for INF losses with Iskander missile system," *Ria Novosti*, November 14, 2007, available at <http://www.en.rian.ru/russia/20071114/88066432.html>.

<sup>22</sup> Ilya Kramnik, "The Iskander: a story of a new face-off," *Ria Novosti*, November 19, 2008, available at <http://www.en.rian.ru/analysis/20081110/118218596.html>.

<sup>23</sup> Mikhail Barabanov, "The Iskander Factor," *Kommersant*, November 9, 2008, available at [http://www.kommersant.com/p1052937/r\\_527/Iskander\\_missiles\\_to\\_counterbalance\\_American\\_AMD\\_systems/](http://www.kommersant.com/p1052937/r_527/Iskander_missiles_to_counterbalance_American_AMD_systems/).

<sup>24</sup> Ilya Kramnik, "Sticking An Iskander Missile Into The ABM Shield Part One," *UPI*, November 19, 2008, available at [http://www.spacewar.com/reports/Sticking\\_An\\_Iskander\\_Missile\\_Into\\_The\\_ABM\\_Shield\\_Part\\_One\\_999.html](http://www.spacewar.com/reports/Sticking_An_Iskander_Missile_Into_The_ABM_Shield_Part_One_999.html); Ilya Kramnik, "Missile bargaining: Iskanders for missile defense," *Ria Novosti*, January 29, 2009, available at <http://www.en.rian.ru/analysis/20090129/119877816.html>.

<sup>25</sup> Jerome Cartillier and Jo Biddle, "US calls on Moscow to get rid of banned arms," *AFP*, July 29, 2014, available at [http://news.yahoo.com/russia-violated-arms-treaty-testing-cruise-missile-us-002749693.html;\\_ylt=A0LEVj1Ex3VVO9YAtnwnnIIQ;\\_ylu=X3oDMTEzZWJidTA2BGNvbG8DYmYxBHBvcwMxBHZ0aWQDRkZHRTAxXzEEc2VjA3Ny#](http://news.yahoo.com/russia-violated-arms-treaty-testing-cruise-missile-us-002749693.html;_ylt=A0LEVj1Ex3VVO9YAtnwnnIIQ;_ylu=X3oDMTEzZWJidTA2BGNvbG8DYmYxBHBvcwMxBHZ0aWQDRkZHRTAxXzEEc2VjA3Ny#).

as doctors say.”<sup>26</sup> The R-500 has now been deployed.<sup>27</sup> Russia may also be in the process of upgrading the R-500 system because there are reports that the Kalibr missile has become associated with it.<sup>28</sup>

There are issues with regard to the Russian RS-26 “ICBMs” compliance with the INF and START Treaties. Bill Gertz, writing in *The Washington Times* and in *The Washington Free Beacon*, has stated that an intelligence community official told him, “The intelligence community believes it’s [the RS-26/Rubezh] an intermediate-range missile that [the Russians] have classified as an ICBM because it would violate the INF treaty’ if its true characteristics were known...”<sup>29</sup> A number of prominent Russian experts have said the RS-26 has a theater-range attack mission. According to *Kommersant*, former Duma Defense Committee Vice Chairman Alexsey Arbatov, said, “...judging from the unofficial assessments of the experts, this system is also designed for intermediate-range targeting, which de facto corresponds to the category of missiles eliminated under the [INF] Treaty...”<sup>30</sup> He also

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<sup>26</sup> “Putin: U.S. Pursuing ‘Imperialist’ Policy,” *The Associated Press*, February 11, 2009, available at [http://www.cbsnews.com/8301-202\\_162-2872235.html](http://www.cbsnews.com/8301-202_162-2872235.html).

<sup>27</sup> “Russia: Engineering Design Bureau Creates A New Missile For Tactical Complex ‘Iskander-M’,” *ARMS-TASS*, February 10, 2014, available at <http://www.dialog.com/proquestdialog/>.

<sup>28</sup> Stephen Forss, “The Russian Operational Tactical Iskander Missile System,” Helsinki Finland: National Defence University, 2012, p. 16, available at [https://www.doria.fi/bitstream/handle/10024/84362/StratL4\\_42w.pdf](https://www.doria.fi/bitstream/handle/10024/84362/StratL4_42w.pdf); “Iskander’s Reach,” *Russian Defense Policy*, November 20, 2016, available at <https://russiandefpolicy.blog/2016/11/20/iskande,rs-reach>; <https://russiandefpolicy.blog/2016/11/20/iskanders-reach/>.

<sup>29</sup> Bill Gertz, “Russian aggression: Putin violating nuclear missile treaty,” *The Washington Times*, June 25, 2013, available at <http://www.washingtontimes.com/news/2013/jun/25/russia-violating-1987-nuclear-missile-treaty/?page=all#pagebreak>.

<sup>30</sup> “Russia: US Suspicions of Russi[a]n Violations of INF Treaty Refuted,” *Kommersant*, December 12, 2013, available at <http://www.dialog.com/proquestdialog/>.

linked the RS-26 MIRVed payload to intermediate-range targeting. Sergey Rogov, Vice Admiral (ret.) Valentin Kuznetsov, Colonel General (ret.) Viktor Yesin and Major General (ret.) Pavel Zolotarev, experts associated with the USA and Canada Institute of the Russian Academy of Science, have called the Rubezh “an ICBM but with reduced flight range (consequently, it can accomplish missions for the destruction of targets in the European Theater).”<sup>31</sup> According to the June 2017 NASIC report, “Russia claims it will deploy the RS-26 Rubezh for shorter-range targets...”<sup>32</sup>

It is unlikely that the RS-26 can actually fly to over 5,500-km with its full warhead load which is reported in the Russian state media to be four warheads of 300-kt.<sup>33</sup> The range of the RS-26 is clearly much less than any real Russian ICBM. (See chart on page 29 of the 2017 NASIC missile report.) The claim that the RS-26 is an “ICBM” is based completely on the Russian assertion that the missile was flown to 5,600-km on its first launch with a single RV.<sup>34</sup> The NASIC report does not confirm this but merely states the Russian press asserts this.<sup>35</sup>

Even if this is true, the missile was tested to the range of about 2,000 kilometers and with multiple warheads.<sup>36</sup> This

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<sup>31</sup> “Russian Experts Assess U.S. Missile Defense Capabilities, List Topics for Arms Negotiations,” *Nezavisimoye Voyennoye Obozreniye Online*, August 5, 2013, available at <http://www.dialog.com/proquestdialog/>.

<sup>32</sup> U.S. Defense Intelligence Agency, *Russia Military Power: Building a Military to Support Great Power Aspirations*, op. cit., p. 38.

<sup>33</sup> “Doomsday Weapon: Russia’s New Missile Shocks and Dazzles US, China,” *Sputnik News*, March 9, 2016, available at <http://sputniknews.com/russia/20160309/1036002714/russia-missile-shocker.html>.

<sup>34</sup> “Russia’s Strategic Missile Forces upgrade combat control systems,” *ITAR-TASS*, January 2, 2014, available at <http://www.en.itar-tass.com/russia/713674>.

<sup>35</sup> National Air and Space Intelligence Center, *Ballistic and Cruise Missile Threat*, op. cit., p. 38.

<sup>36</sup> Pavel Podvig, “Russia continues tests of new ICBM, named Rubezh,” *RussianForces.org*, June 6, 2013, available at [http://russianforces.org/blog/2013/06/russia\\_continues\\_tests\\_of\\_new.shtml](http://russianforces.org/blog/2013/06/russia_continues_tests_of_new.shtml).

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has never happened before with regard to any ICBM. While there are occasional tests of Russian ICBMs to less than ICBM range,<sup>37</sup> the vast majority of ICBM tests fly to ICBM range. In fact, the possibility of avoiding the INF Treaty's restrictions by labeling a prohibited missile an "ICBM" in just this fashion was raised by U.S. senators during the INF Treaty ratification process, and such testing was authoritatively interpreted as a violation of the INF Treaty.

In 1988, Senator Sam Nunn (D., Ga.) stated that "during the hearings [on the INF Treaty], concern was expressed that the Soviets could develop and deploy a new type of ground-launched ballistic missile to replace the SS-20 if the missile were tested the first time at a range in excess of 5,500 kilometers, even if every other test was at INF ranges." Senator Nunn then quoted a letter from Assistant Secretary of State Ed Fox stating the Reagan Administration's interpretation of the treaty as follows: "If the test at strategic range was with a configuration (booster, stages, postboost vehicle, RVs [reentry vehicles]) that is unlike that used for remaining tests of the system at INF range, the configuration tested to INF range would be considered a new missile in the INF range and prohibited by the Treaty."<sup>38</sup> This describes the Russian- depicted RS-26 fact situation and the Fox letter characterizes it as a Treaty violation.

Later on, the Reagan Administration stated that if such testing actually occurred it wanted to address the issue on a case-by-case basis. When it did happen, the Obama Administration ignored the Fox interpretation and

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<sup>37</sup> Ibid.

<sup>38</sup> "Markups and Hearings Before the Committee on Foreign Relations United States Senate One Hundredth Congress Second Session on The Treaty Between the United States of American and the Union of Soviet Socialist Republics on the Elimination of Their Elimination of the Intermediate-range and Shorter-range Missiles," March 22, 23, 24, 28, 29 and 30 , and May 1988, Part 6, p. 137, available at <https://babel.hathitrust.org/cgi/pt?id=mdp.39015014754454;view=1up;seq=1>.

apparently did not do any case-by-case analysis of the RS-26 fact situation. This appears to be a violation of the Biden condition for INF Treaty ratification which stated that a Treaty must be interpreted consistent with the way it was authoritatively explained to the Senate. Ironically, the Obama Administration is the only one to have violated the Biden condition.

There is also a New START Treaty compliance issue relating to the RS-26. The RS-26 apparently uses the first two stages of the SS-27,<sup>39</sup> which is an ICBM maintained, stored and transported as an assembled missile in a launch canister. If so, this is a violation of the New START Treaty because the first stage of the missile is coming out of a production facility in two upper stage configurations. The same provision was in the START Treaty and it was authoritatively interpreted during the Clinton Administration when two versions of the SS-25 ICBM were produced.<sup>40</sup> Significantly, the House Armed Services Committee is attempting to mandate a study of the RS-26 compliance issue.<sup>41</sup>

The threat to U.S. allies from the RS-26 is quite substantial. The argument that it does not matter if the RS-26 violates the INF Treaty because it will be captured by the New START Treaty is apparently bogus. In 2010, then-Senator Jon Kyl (R-AZ) noted, "It is clear from the [Senate Foreign Relations Committee] report that the language [in the New START Treaty] would not cover rail-mobile

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<sup>39</sup> Pavel Podvig, "More news about RS-26 missile," *RussianForces.org*, December 18, 2013, available at [http://russianforces.org/blog/2013/12/more\\_news\\_about\\_rs-26\\_missile.shtml](http://russianforces.org/blog/2013/12/more_news_about_rs-26_missile.shtml).

<sup>40</sup> The START Treaty, Joint Statement 21, available at [http://www.acq.osd.mil/tc/treaties/start1/other/jcic\\_joint\\_statements/joint\\_statements\\_21.htm](http://www.acq.osd.mil/tc/treaties/start1/other/jcic_joint_statements/joint_statements_21.htm).

<sup>41</sup> Pavel Podvig, "RS-26 and other intermediate-range ICBMs," *RussianForces.org*, July 18, 2017, available at [http://russianforces.org/blog/2017/07/rs-26\\_and\\_other\\_intermediate-r.shtml](http://russianforces.org/blog/2017/07/rs-26_and_other_intermediate-r.shtml).

systems if Russia were to reintroduce them.”<sup>42</sup> Not surprisingly, Russia has announced it is developing a rail-mobile ICBM. Significantly, the New START Treaty omitted all references to rail-mobile ICBMs and changed the mobile ICBM launcher definition to exclude them.<sup>43</sup> It is reported that the rail-mobile ICBM will be based on the RS-24/Yars ICBM.<sup>44</sup> Colonel (ret.) Viktor Litovkin, now a noted, if hardline, Russian journalist, wrote in the state media that the MS-26 [RS-26] Rubezh missile will be deployed on the rail-mobile launcher.<sup>45</sup> If so, potentially significant numbers of the RS-26 missiles and their warheads will not be limited by New START unless the Treaty is amended. The U.S. resolution of ratification requires a Treaty amendment to

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<sup>42</sup> “Russia Plans Rail-Mounted Missiles to Counter US Global Strike Program,” *Ria Novosti*, December 18, 2013, available at [http://en.ria.ru/military\\_news/20131218/185683711/Russia-Plans-Rail-Mounted-Missiles-to-Counter-US-Global-Strike.html](http://en.ria.ru/military_news/20131218/185683711/Russia-Plans-Rail-Mounted-Missiles-to-Counter-US-Global-Strike.html).; “Russia designing ‘new’ rail-mobile ICBM system, troops getting new missiles,” *Interfax-AVN*, December 13, 2013.; “Russia steps up developing new rail-mobile missile systems,” *Interfax*, December 26, 2012, available at [http://rbth.ru/articles/2012/12/26/Russia\\_steps\\_up\\_developing\\_new\\_rail-mobile\\_missile\\_systems\\_21476.html](http://rbth.ru/articles/2012/12/26/Russia_steps_up_developing_new_rail-mobile_missile_systems_21476.html).

<sup>43</sup> Christopher Ford, “Does ‘New START’ Fumble Reloads and Rail Mobile ICBMs?,” *NewParadigmsForum.com*, April 26, 2010, available at [http://www.newparadigmsforum.com/New\\_Paradigms\\_Forum/Nuclear\\_Weapons/Entries/2010/4/26\\_New\\_START\\_Fumbles\\_Missile\\_REloads\\_and\\_Rail-Mobile\\_ICBMs.html](http://www.newparadigmsforum.com/New_Paradigms_Forum/Nuclear_Weapons/Entries/2010/4/26_New_START_Fumbles_Missile_REloads_and_Rail-Mobile_ICBMs.html).; “An Independent Assessment of New START Treaty,” *Heritage Foundation*, April 30, 2010, available at <http://www.heritage.org/arms-control/report/independent-assessment-new-start>.

<sup>44</sup> “Russia successfully tests latest ‘YARS’ intercontinental ballistic missile,” *RT*, December 24, 2013, available at <http://rt.com/news/yars-missile-russia-launch-729/>.

<sup>45</sup> Viktor Litovkin, “Trans-Siberian Firepower - Russia Just Armed Trains with Nuclear ICBMs -- The Trans-Siberian Railroad just got an upgrade,” *Russia Beyond the Headlines*, May 17, 2016, available at <http://russia-insider.com/en/military/trans-siberian-firepower-russia-just-armed-trains-nuclear-icbms/ri14384>.

bring rail-mobile ICBMs into the New START Treaty.<sup>46</sup> The Obama Administration certainly did not negotiate any Treaty amendment bringing rail-mobile launchers into the New START Treaty and apparently did not even try.

There are major INF Treaty compliance issues associated with Russian surface-to-air missiles and missile defense interceptors. While the INF Treaty allows INF-range missiles of this type, it does so provided they are “solely” for air or missile defense.<sup>47</sup> In July 2010, Pavel Felgenhauer wrote, “...Moscow plans to covertly quit the 1987 treaty on medium and short-range missiles” because the Russian S-300 and the S-400 air defense missiles, the new S-500 air and missile defense interceptor and the Moscow ABM interceptors are nuclear armed and can function as “dual-use as conventional or nuclear medium or shorter range ballistic missiles.”<sup>48</sup> He also wrote that this capability was actually demonstrated in the Russian Far East Vostok-2010 military exercise.<sup>49</sup> *Red STAR*, the official newspaper for the Russian Defense Ministry, has reported that Russia has 700 nuclear warheads for the Moscow ABM and its surface-to-air missiles.<sup>50</sup> In April 2015, Felgenhauer wrote that the Russian S-300 system (the shortest range of the systems he listed) has a nuclear ground-attack capability

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<sup>46</sup> U.S. Senate Resolution of Ratification for the New START Treaty, December 22, 2010, understanding 2b and 2d, available at [foreign.senate.gov/download/?id=E4C3A1B3-D023-4F58-8690](http://foreign.senate.gov/download/?id=E4C3A1B3-D023-4F58-8690).

<sup>47</sup> The INF Treaty, Article VII, paragraph 3, available at <http://www.acq.osd.mil/tc/treaties/inf/text.htm#article4>.

<sup>48</sup> Pavel Felgenhauer, “Russia Seeks to Impose New ABM Treaty on the US by Developing BMD,” *Eurasia Daily Monitor*, Vol. 7, No. 136 (July 16, 2010), available at [http://www.jamestown.org/single/?no\\_cache=1&tx\\_ttnews\[tt\\_news\]=36624](http://www.jamestown.org/single/?no_cache=1&tx_ttnews[tt_news]=36624).

<sup>49</sup> *Ibid.*

<sup>50</sup> “In a Broad Context,” *Krasnaya Zvezda Online*, April 29, 2011, available at <http://www.dialog.com/proquestdialog/>.

with a range of “up to 400 kilometers.”<sup>51</sup> This article contained a link to a statement by the President of Belarus to the effect that the S-300 had a surface-to-surface capability. In February 2016, Felgenhauer noted that the S-300PMU2, which Russia has sold to Iran, can attack “land and sea targets” with precision accuracy.<sup>52</sup>

Evidence for the reported surface-to-surface role has now appeared in the Russian state media. In February 2016, TASS reported the S-400 “can also be used against ground objectives.”<sup>53</sup> TASS has reported this many times. State-run *Russia Today* has said the S-400 can strike ground and naval targets.<sup>54</sup> In March 2017, TASS quoted Col. Alexander Gordeyev, the head of the Eastern Military District’s press service, as saying, “Crews of the S-300 missile systems performed rocket strikes at ground air defense objects of a simulated enemy.”<sup>55</sup>

If what Felgenhauer says is true, the Moscow ABM system violated the INF Treaty since the first day it was in force because the range of some of its interceptors was long.<sup>56</sup> Whether the S-300 and S-400 surface-to-air missiles

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<sup>51</sup> Pavel Felgenhauer, “Moscow Is Ready to Supply Iran With Powerful S-300 Missiles,” *Eurasia Daily Monitor*, Vol. 12, No. 71 (April 16, 2015), available at [http://www.jamestown.org/single/?tx\\_ttnews\[tt\\_news\]=43800&no\\_cache=1#.VTgxxpN4d0Q](http://www.jamestown.org/single/?tx_ttnews[tt_news]=43800&no_cache=1#.VTgxxpN4d0Q).

<sup>52</sup> Pavel Felgenhauer, “Russia’s S-300 Shipment to Iran Appears Stalled Again,” *Eurasia Daily Monitor*, Vol. 13, No. 33 (February 18, 2016), available at [http://www.jamestown.org/single/?tx\\_ttnews\[tt\\_news\]=45106&no\\_cache=1#.Vs3kmeZOyUk](http://www.jamestown.org/single/?tx_ttnews[tt_news]=45106&no_cache=1#.Vs3kmeZOyUk).

<sup>53</sup> “Russian Armed Forces will get five S-400 air defense systems in September-October 2016,” TASS, February 29, 2016, available at <http://tass.ru/en/defense/859641>.

<sup>54</sup> “S-400 missile defense regiment takes up combat duty outside Moscow (VIDEO),” *Sputnik News*, January 11, 2017, available at <https://www.rt.com/news/373371-moscow-air-defense-s400/>.

<sup>55</sup> “S-300 missiles strike simulated enemy’s ground air defenses in East Siberian drills,” TASS, March 31, 2017, available at <http://tass.com/defense/938610>.

<sup>56</sup> U.S. Department of Defense, *Soviet Military Power* (Washington, D.C.: Department of Defense, 1987), p. 47, available at <http://edocs.nps.edu/2014/May/SovietMilPower1987.pdf>.

violate the INF Treaty depends upon their testing history. If the S-500 has a surface-to-surface role, it would be virtually impossible for this missile, with a stated intercept range of 600-km,<sup>57</sup> not to violate the INF Treaty once it is fully tested.

While this may not be a violation of the INF Treaty, Russia is in the process of circumventing it by the deployment of an advanced version of the nuclear capable Iskander-M ballistic missile with a reported range of 600-1,000-km.<sup>58</sup> The Treaty accountable range of ballistic missiles is the maximum tested range, not range potential as is the case with cruise missiles. It is probably not necessary to test the Iskander-M to its maximum range to have confidence in its capabilities in the 500-1,000-km range band.

Writing in September 2011, Russian journalist Vladimir Kudelev noted that Russia's Federal Space Agency published a request for proposals for "the elimination of the solid-propellant rocket engines and warheads of intercontinental ballistic missiles (ICBMs) of the Kuryer, Skorost, and Topol-M missile complexes and the Bark submarine-launched ballistic missiles (SLBMs)."<sup>59</sup> The

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<sup>57</sup> "Russia Develops the S-500 – a New Anti-Missile Defense System," *DefenseUpdate.com*, September 26, 2009, available at [http://defense-update.com/20090925\\_s-500.html](http://defense-update.com/20090925_s-500.html); "Russia: S-500 Missile Defense System To Enter Service in 2015," *Moscow Argumenty Nedeli Online*, October 14, 2010, available at <http://www.dialog.com/proquestdialog/>.

<sup>58</sup> "Army Brigade To Be Equipped With Iskander Systems This Year – Commander," *ITAR-TASS*, September 28, 2009, available at <http://www.dialog.com/proquestdialog/>; "Russia deploys missiles on NATO doorstep: Lithuania," *AFP*, October 16, 2016, available at <http://timesofindia.indiatimes.com/world/europe/Russia-deploys-missiles-on-NATO-doorstep-Lithuania/articleshow/54754894.cms>; Viktor Myasnikov, "Full Aft. Verbal Arms Race Is Under Way and Has Prospects of Becoming Real One," *Moscow Nezavisimaya Gazeta*, Nov 21, 2007, available at <http://www.dialog.com/proquestdialog/>.

<sup>59</sup> Vladimir Kudelev, "The Super-Accurate Skorost and the Undetectable Kuryer. The Forgotten Unique Developments of Aleksandr Nadiradze," *Voyenno-Promyshlennyi Kuryer Online*, October 12, 2011, available at <http://www.dialog.com/proquestdialog/>.

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problem, as Kudelev noted, was that the Skorost was “erroneously described as an ICBM” because it “had a maximum range of 4,000 km.” Since the missile had been flight tested in the 1980s, it should have been declared and eliminated under the INF Treaty.<sup>60</sup> While this may not be a current compliance issue if the missiles have been eliminated due to age, it would be useful for the NPR to look at the issue of how many of these missiles were produced and when they were produced. This has substantial implications for accurately assessing the scope of Russian cheating.

What does this mean for the NPR? First, Russia is now aware that we are very reluctant to react to its arms control violations. Consequently, Russia will violate any arms control agreement to the extent it finds necessary or convenient. If it gets away with violating the INF Treaty, the scope of its other arms control violations will likely increase. Second, the politics of arms control compliance will restrict dissemination of critical information to much of the military. This has happened before,<sup>61</sup> and it will happen again. Third, diplomacy will not resolve the INF issues and there will never be any NATO consensus on an arms control compliance issue. Hence, the U.S. must act on its own like the Reagan Administration did when it terminated U.S. observance (under a “no undercut” policy) of the SALT I and II agreements in response to Soviet violations. Fourth, we have to deter a range of Russian military options that directly result from their violation and circumvention of the INF Treaty and their political commitments under the 1991-

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<sup>60</sup> “Russia: Recommendations Made for Upgrading Strategic Nuclear Forces for Strategic Deterrence Mission,” *Nezavisimoye Voyennoye Obozreniye*, September 16, 2013, available at <http://www.dialog.com/proquestdialog/>.

<sup>61</sup> *Principal Findings of the Capabilities of the United States to Monitor the SALT II Treaty – Report of the Senate Select Committee on Intelligence*, United States Senate, October 1979, pp. 3-4.; 2. “The Select Committee Investigative Record,” *The Village Voice*, February 16, 1978, p. 92.

1992 Presidential Nuclear Initiatives regarding tactical nuclear weapons. Russia has achieved an enormous superiority in non-strategic nuclear systems that we cannot have because of continued unilateral U.S. compliance with the INF Treaty and the political commitments that Russia is violating. In effect, Russia has reconstituted the Soviet non-strategic or theater/tactical nuclear Triad while we have reduced our capability to dual capable fighter aircraft carrying only gravity bombs. This leaves us much more vulnerable than we should be which, in turn, could result in Russian first use of tactical nuclear weapons in a war against NATO. Today, the INF Treaty provides no security benefit for the U.S. or NATO. Its verification regime is long dead and, moreover, even if it still existed, it would not provide information relevant to the existing compliance issues unless Russia were really stupid and deployed prohibited missiles at bases open to inspection.

The military implications of the INF Treaty violations are stark. The Soviet INF-range ground-launched missile capability was extensive, but it was entirely nuclear and the missiles were not very accurate. The emerging pattern of Russian INF Treaty violations will result in a force even more threatening. Russia is migrating to a ground-launched missile force that will probably be 100% dual capable with high accuracy. Russian ground-launched cruise missiles will also probably become hypersonic. Russian INF-range missiles probably carry precision low-yield and low-collateral damage nuclear weapons as well as traditional high-yield weapons and a variety of conventional weapons. U.S. INF missiles have migrated to the Smithsonian, and, unless we change policy, they will remain there.

The NPR should address the implications of the Russian INF Treaty violations for global stability. China is also a beneficiary of the INF Treaty which is now providing no security benefit for the U.S. or our Asian allies. Indeed, the 2017 edition of the Pentagon's annual China report confirms

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China is deploying the new DF-26 IRBM which “is capable of conducting conventional and nuclear precision strikes against ground targets and conventional strikes against naval targets in the western Pacific Ocean.”<sup>62</sup> The large Chinese force of ground-launched INF-range missiles could determine the outcome of a major war as well as making it much more likely.

Failure to react to Russia’s violations of its arms control commitments will significantly enhance the risk of war. The Reagan Administration, which concluded the INF Treaty, would have terminated it in response to Russia’s egregious behavior. Its termination of the SALT I and II agreements in response to Soviet violations very likely contributed to the negotiation of the START and INF Treaties and resulted in some corrective action with regard to Soviet violations in the late Soviet period. The failure of all administrations after George H.W. Bush to punish Russia for arms control violations has contributed to the situation we now face.

Compliance with arms control agreements is critical to our national security and global stability. Unilateral compliance with arms control agreements is tantamount to unilateral disarmament. As President Ronald Reagan stated in 1982, “Simply collecting agreements will not bring peace. Agreements genuinely reinforce peace only when they are kept. Otherwise, we are building a paper castle that will be blown away by the winds of war.”<sup>63</sup>

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<sup>62</sup> U.S. Department of Defense, *Military and Security Developments Involving the People’s Republic of China 2017* (Washington, D.C.: Department of Defense, 2017), p. 31, available at [https://www.defense.gov/Portals/1/Documents/pubs/2017\\_China\\_Military\\_Power\\_Report.PDF?ver=2017-06-06-141328-770](https://www.defense.gov/Portals/1/Documents/pubs/2017_China_Military_Power_Report.PDF?ver=2017-06-06-141328-770).

<sup>63</sup> Ronald Reagan, “Remarks in New York, New York, Before the United Nations General Assembly Special Session Devoted to Disarmament,” *University of Texas*, June 17, 1982, available at [http://www.reagan.utexas.edu/archives/speeches/1982/61782a.htm\\_](http://www.reagan.utexas.edu/archives/speeches/1982/61782a.htm_).



## Trust Without Verification: The Wrong Approach to Arms Control \*

Earlier this year, the State Department's report to Congress on New START implementation declared that "the United States certifies the Russian Federation to be in compliance with the terms of the New START Treaty."<sup>1</sup> In addition, the Arms Control Association published an article in July 2022 which stated, "Despite its illegal war on Ukraine and nuclear exercises, Russia continues to adhere to New START. This is evidenced by the most recent data exchange under the treaty March 1 and the test of a new nuclear-capable intercontinental ballistic missile called the Sarmat April 20, about which Washington received advance notice due to the treaty requirements."<sup>2</sup> Interestingly, however, the article also noted that "the United States and Russia have not yet resumed regular inspections under New START since they were suspended in 2020 due to the coronavirus pandemic[.]"<sup>3</sup> In fact, State Department documents confirm that there have been no inspections in over two years.<sup>4</sup>

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\* Original publication: Mark B. Schneider, "Trust Without Verification: The Wrong Approach to Arms Control," *Information Series*, No. 532 (Fairfax, VA: National Institute Press, September 1, 2022).

<sup>1</sup> U.S. Department of State, "Report to Congress on Implementation of the New START Treaty Paragraph (a)(10) from Declaration (13) of Senate Executive Report 111-6 accompanying the New START Treaty (Treaty Doc. 111-5), 2022, p. 4, available at <https://www.state.gov/wp-content/uploads/2022/04/New-START-Treaty-Annual-Implementation-Report.pdf>.

<sup>2</sup> Shannon Bugos, "U.S.-Russian Dialogue Remains Paused as Putin Wields Nuclear Threats," Arms Control Association, July 19, 2022, available at <https://www.armscontrol.org/blog/2022-07/nuclear-disarmament-monitor>.

<sup>3</sup> Ibid.

<sup>4</sup> U.S. Department of State, "The New START Treaty," August 4, 2022, available at <https://www.state.gov/new-start/>; U.S. Department of State, 2022, available at <https://www.state.gov/wp-content/uploads/2022/04/New-START-Treaty-Annual-Implementation-Report.pdf>; New START Treaty Inspection Activities.

It strains credulity that the Biden Administration can certify Russia's compliance with New START in the absence of the very inspections mandated by the treaty to verify compliance. Such an approach stands Ronald Reagan's maxim, "Trust, but verify," on its head.

Initially, the absence of inspections was not exactly highlighted. It was buried in statistical data that few ever notice. A February 2021 State Department "Fact Sheet" on New START waxed eloquent on the virtues of the New START verification regime while ignoring the fact that no inspections were being conducted.<sup>5</sup> The Biden Administration's 2021 report on the implementation of the New Start Treaty did not mention the suspension of all inspections under New START at all.<sup>6</sup> It was not until the 2022 report certification of Russian New START Treaty compliance that the Department of State revealed that "...the United States and the Russian Federation have chosen to pause onsite inspections since March 2020 due to the COVID-19 pandemic..."<sup>7</sup>

The report language even hinted that the United States may have given the Russians a *de facto* veto over the resumption of inspections. It states, "...the United States and the Russian Federation continue to implement all required notifications and data exchanges under the treaty, and have been in communication regarding conditions for the safe resumption of inspections." Indeed, a recent Russian announcement stated, "On August 8, 2022, the Russian Federation officially informed the United States via diplomatic channels that our country is temporarily

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<sup>5</sup> U.S. Department of State, "New START Treaty Mythbusters Fact Sheet," February 3, 2021, available at <https://www.state.gov/new-start-treaty-mythbusters/>.

<sup>6</sup> U.S. Department of State, "Report to Congress on Implementation of the New START Treaty Paragraph (a)(10) from Declaration (13) of Senate Executive Report 111-6 accompanying the New START Treaty (Treaty Doc. 111-5)," 2022, op. cit.

<sup>7</sup> Ibid.

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exempting its facilities from inspection activities under the New START Treaty.”<sup>8</sup> This Russian action suggests that the Biden Administration informed Moscow that it intended to exercise its treaty inspection rights. The Russian Foreign Ministry justified the suspension of on-site inspections on the basis of “Washington’s stubborn striving to achieve, without prior arrangement, the resetting of inspection activities on conditions that do not take into account existing realities and are creating unilateral advantages for the United States, and are de facto depriving the Russian Federation of the right to conduct inspections on American territory.”<sup>9</sup> The statement also asserted that the suspension of inspections was “related to COVID-19” and the need “to maintain the health and safety of Russian inspectors and flight crews...”<sup>10</sup>

The Russian rationale for this action is clearly bogus and has little to do with transportation problems for the inspectors or Covid-19 as Russia suggested in its statement. In fact, the minimal impact of inspections on the Russian military is not a likely reason. Almost all of Russia’s New START inspectable facilities have no relationship to the war in Ukraine. The Russian announcement makes it clear that there will be no inspections anytime soon.

The United States has a legal right to resume inspections. While it would be reasonable for the United States to give Russia sufficient notice to be prepared (as has apparently been the case), Russia certainly has no veto rights over inspections.

The Russians are likely doing this to hide something. Putin’s Russia may have illegally uploaded its strategic

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<sup>8</sup> “Foreign Ministry statement on the Treaty on Measures for the Further Reduction and Limitation of Strategic Offensive Arms,” Russian Ministry of Foreign Affairs, August 8, 2022, available at [https://www.mid.ru/en/foreign\\_policy/news/1825525/](https://www.mid.ru/en/foreign_policy/news/1825525/).

<sup>9</sup> Ibid.

<sup>10</sup> Ibid.

nuclear forces, particularly mobile ICBMs and SLBMs, which can be done more secretly than ICBM silos. Putin puts enormous value on his nuclear forces, demonstrated by Russia's extensive buildup of its nuclear potential. Retired British General Sir Richard Barrons has pointed out that Putin is "...likely to employ tactical nuclear weapons' if he faces being pushed back in Ukraine."<sup>11</sup> If he does so, in the aftermath of his nuclear use, he would clearly seek to deter any commensurate Western response.

The Department of State has not explained how it can certify New START compliance without inspections for what is now 28 months and counting. The State Department 2022 certification of Russian compliance looks like it was made without any legal determination and solely on the basis of Russian-provided data.

In light of the Russian non-compliance record<sup>12</sup> (and the very poor compliance record of the Soviets before it<sup>13</sup>), Putin's current behavior in Ukraine, which involves the violation of an international agreement (the Budapest

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<sup>11</sup> Henry Holloway, "Vladimir Putin is not afraid to use nukes & he could launch strike very soon, warns top British general," *TheSun.com*, August 7, 2022, available at <https://www.the-sun.com/news/5947154/vladimir-putin-nuclear-weapons-ukraine-general/>.

<sup>12</sup> Dr. Christopher Ashley Ford, "Russian Arms Control Compliance and the Challenge of the Next Agreement," U.S. Department of State, June 23, 2020, available at <https://2017-2021.state.gov/Russian-Arms-Control-Compliance-and-the-Challenge-of-the-Next-Agreement/index.html>; William Schneider, "Arms Control: The Lesson of Russia's Serial Treaty Violations," Hudson Institute, September 18, 2014, available at <https://www.hudson.org/research/10613-arms-control-the-lesson-of-russia-s-serial-treaty-violations>; U.S. Department of State, "2021 Adherence to and Compliance With Arms Control, Nonproliferation, and Disarmament Agreements and Commitments," available at <https://www.state.gov/2021-adherence-to-and-compliance-with-arms-control-nonproliferation-and-disarmament-agreements-and-commitments/>.

<sup>13</sup> U.S. Department of State, "Soviet Noncompliance With Arms Control Agreements," Special Report No. 122, U.S. Department of State, February 1, 1985, available at <http://insidethecoldwar.org/sites/default/files/documents/Soviet%20Non%20compliance%20with%20Arms%20control%20Agreements%201985%20%282%29.pdf>.

Memorandum)<sup>14</sup> as well as Putin's war crimes, why should anyone expect Russian compliance with New START? President Putin and his regime have a record of constant nuclear threats<sup>15</sup> (35 or more by President Putin alone, according to then-British Prime Minister Boris Johnson<sup>16</sup>). Russia is spending large sums to increase its nuclear capability. Hence, it is difficult to understand how anyone would assume, much less make a **legal certification**, that Russia is in compliance with the New START Treaty without substantial evidence, evidence which certainly cannot be demonstrated without inspections.

The fact that Russia notified the first launch of the Sarmat ICBM does not mean that Russian data on their warhead and delivery vehicle numbers is accurate. Two years plus is enough time to upload hundreds or even a thousand or more illegal warheads and there are other New START Treaty compliance issues as well. The situation is likely to get much worse with the deployment of the new heavy Sarmat ICBM later this year.

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<sup>14</sup> David Hobbs, "Russian Guarantees to Ukraine," Atlantic Treaty Association, available at <https://atauk.org/index.php/2022/01/07/russia-guarantee-ukraine/>.

<sup>15</sup> "Russia's Medvedev warns United States: messing with a nuclear power is folly," *Reuters*, July 6, 2022, available at <https://www.reuters.com/world/russias-medvedev-warns-united-states-messing-with-nuclear-power-is-foley-2022-07-06/>; Stephen Blank, "Russian Nuclear Strategy in the Ukraine War: An Interim Report," No. 525, National Institute for Public Policy, June 15, 2022, available at <https://nipp.org/informationseries/stephen-blank-russian-nuclear-strategy-in-the-ukraine-war-an-interim-report-no-525-june-15-2022/>; Mark B. Schneider, "Threats of War and Nuclear War: Putin's Effort to Revive the Soviet Union," *Real Clear Defense*, January 18, 2022, available at [https://www.realcleardefense.com/articles/2022/01/18/threats\\_of\\_war\\_and\\_nuclear\\_war\\_putins\\_effort\\_to\\_revive\\_the\\_soviet\\_union\\_812521.html#!](https://www.realcleardefense.com/articles/2022/01/18/threats_of_war_and_nuclear_war_putins_effort_to_revive_the_soviet_union_812521.html#!).

<sup>16</sup> Brendan Cole, "Vladimir Putin Has Threatened Nuclear War at Least 35 Times—U.K.'s Johnson," *Newsweek*, July 1, 2022, available at <https://www.msn.com/en-us/news/world/vladimir-putin-has-threatened-nuclear-war-at-least-35-times-uks-johnson/ar-AAZ4eaI>.

Even the full New START Treaty verification regime is seriously defective and represents a major retreat from the more comprehensive verification regime of the original START Treaty.<sup>17</sup> In 2010, then-Senator Christopher Bond, Vice Chairman of the Senate Select Intelligence Committee, noted that, “The Select Committee on Intelligence has been looking at this issue closely over the past several months. As the vice chairman of this committee, I have reviewed the key intelligence on our ability to monitor this treaty and heard from our intelligence professionals. There is no doubt in my mind that the United States cannot reliably verify the treaty’s 1,550 limit on deployed warheads.”<sup>18</sup> Without an inspection regime in operation there is simply no possibility of counting the number of warheads on deployed Russian missiles with only National Technical Means of verification (NTM), particularly with the very high standards mandated in arms control compliance decisions. This is the reason why warhead on-site inspection was included in the original START Treaty.

With the complete absence of inspections, the New START Treaty is far worse than any 1970s arms control treaty. The 1970s treaties, as bad as they were, took into account the limits of NTM of verification because there were not yet any inspection regimes in place and most believed

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<sup>17</sup> “New START: Potemkin Village Verification” (Washington, D.C.: The Heritage Foundation, June 24, 2010), available at <http://www.heritage.org/research/reports/2010/06/new-start-potemkin-villageverification?query=New+START:+Potemkin+Village+Verification>; Mark B. Schneider, *New START: The Anatomy of a Failed Negotiation* (Fairfax, VA: National Institute Press, July 2012), pp. 25-45, available at <http://www.nipp.org/wp-content/uploads/2014/12/New-start.pdf>; James Woolsey, “Old Problems with New START,” *Wall Street Journal*, November 15, 2010, available at <http://www.sroblog.com/2010/11/15/r-james-woolsey-old-problems-with-new-start-wsj/>; John R. Bolton, “A Treaty for Utopia,” *National Review Online*, May 3, 2010, available at <http://article.nationalreview.com/431722/a-treaty-for-utopia/john-r-bolton?page=4>.

<sup>18</sup> Senator Christopher Bond, “New START Treaty,” *Congressional Record*, November 18, 2010, available at [https://irp.fas.org/congress/2010\\_cr/bond-nstart.html](https://irp.fas.org/congress/2010_cr/bond-nstart.html).

that the Soviet Union would never agree to them. In New START, there is a complete absence of attribution rules – that is, how many warheads are counted for each type of deployed ICBM and SLBM. Thus, even if we had an accurate count of Russian deployed missiles (which we may not), there is no way to assess the accuracy of Russian declarations on the total number of accountable warheads without an effective on-site inspection regime. The New START Treaty eliminated the important original START Treaty provisions for monitoring production of mobile ICBMs.<sup>19</sup> The current elimination of all Treaty inspections simply makes matters worse.

According to the Center for Arms Control and Non-Proliferation, New START Treaty inspections are “...designed to deter both sides from deploying a missile with more than the declared number of warheads.”<sup>20</sup> That deterrent effect is obviously now gone. In May 2020, the former Chief New START negotiator and former Under Secretary of State Rose Gottemoeller claimed that in New START, “...we discarded the counting rules in favor of confirming declared warheads on the front of missiles through reciprocal inspections; in fact, we did not need telemetry measures to confirm compliance with the warhead limits in the new treaty...”<sup>21</sup> However, critically, what is undoubtably true is that today we have lost counting rules that allow NTM to count the number of Treaty accountable warheads, telemetry tapes (which in the original START Treaty were used to verify technical data

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<sup>19</sup> “New START: Potemkin Village Verification,” op. cit.: Schneider, *New START: The Anatomy of a Failed Negotiation*, op. cit.

<sup>20</sup> “Fact Sheet: Understanding the New START Agreement,” Center for Arms Control and Non-Proliferation, January 19, 2017, available at <https://armscontrolcenter.org/understanding-new-start-agreement/>.

<sup>21</sup> Rose Gottemoeller, “The New START Verification Regime: How Good Is It?,” *The Bulletin of the Atomic Scientists*, May 21, 2020, available at <https://thebulletin.org/2020/05/the-new-start-verification-regime-how-good-is-it/>,

and other constraints) and inspections. Absent these three factors, there is no basis for making legal assessments of the number of deployed Russian ICBM and SLBM warheads to the high standards required for arms control compliance assessments. Moreover, Secretary Gottemoeller did not mention the near complete elimination in New START of the original START Treaty prohibition on telemetry encryption.<sup>22</sup> This factor is potentially as important as the three listed above because it has the potential to degrade the utility of NTM. The high level of Soviet telemetry encryption was one of the major verification concerns with respect to the 1979 SALT II Treaty.<sup>23</sup>

The suspension of Treaty inspections arguably may have been reasonable in March 2020 but it is not today because of the new tests, vaccines and treatments for Covid-19 that have been developed. Continuing zero inspections in the current context of high-level Russian threats concerning nuclear war over Ukraine is irresponsible. The Russian action is a material breach of the Treaty because it can hide large scale cheating, and the potential for Russian cheating in the absence of inspections is now very high.

Almost all Russian ICBMs and SLBMs can deliver many more warheads than are accountable in order for Russia to get the number of deployed warheads under 1,550 in their data on the New START Treaty, making a large “breakout” possible.<sup>24</sup> In December 2019, Secretary Gottemoeller wrote “...the Russians could rapidly add several hundred more warheads, some say up to a thousand warheads, to their existing deployments of ICBMs without deploying a single

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<sup>22</sup> “New START: Potemkin Village Verification,” op. cit.

<sup>23</sup> “Soviet Noncompliance With Arms Control Agreements,” op. cit.

<sup>24</sup> Mark B. Schneider, “Russia Nuclear Breakout and the New START Treaty,” *Real Clear Defense*, January 14, 2020, available at [https://www.realcleardefense.com/articles/2020/01/14/russiauclearbreakoutandthenewstart\\_treaty\\_114973.html](https://www.realcleardefense.com/articles/2020/01/14/russiauclearbreakoutandthenewstart_treaty_114973.html).

additional missile.”<sup>25</sup> This may actually be an underestimate.

As a result of more than two years of zero inspections, this “breakout” may have already happened. State-run *Ria Novosti* reported that the new Yars ICBM “can carry between 6 and 10 warheads.”<sup>26</sup> Although the new Bulava-30 SLBM was declared by Russia under the START Treaty to be a six warhead missile,<sup>27</sup> some Russian sources, including Russian state media, report up to ten warheads.<sup>28</sup> The improved Sineva SLBM also reportedly carries up to ten warheads,<sup>29</sup> And the improved Russian Liner SLBM is reportedly a ten warhead system as well.<sup>30</sup> According to *RT*, the Russian Ministry of Defense said that the new “...Sarmat [heavy ICBM] will be able to carry up to 20 warheads of small, medium, high power classes.”<sup>31</sup> TASS,

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<sup>25</sup> Faizan Hashmi, “US May Lose Nuclear Parity With Russia Without START - Ex-NATO Deputy Chief,” *Urdupoint.com*, December 6, 2019, available at <https://www.urdupoint.com/en/world/us-may-lose-nuclear-parity-with-russia-withou-780081.html>.

<sup>26</sup> “Robert Gates shows nuclear impatience,” *Ria Novosti*, November 1, 2008, available at <https://sputniknews.com/20081101/118086970.html>.

<sup>27</sup> Pavel Podvig, “Bulava has six warheads,” *Russian Strategic Nuclear Forces.com*, April 3, 2006, available at [https://russianforces.org/blog/2006/04/bulava\\_has\\_six\\_warheads.shtml](https://russianforces.org/blog/2006/04/bulava_has_six_warheads.shtml).

<sup>28</sup> “WATCH: Russian cutting-edge nuclear sub fires barrage of FOUR intercontinental ballistic missiles,” *RT*, December 3, 2020, available at <https://www.rt.com/russia/509510-nuclear-submarine-missile-launch/>. “Russian submarine successfully test-fires Bulava intercontinental missile,” TASS, June 26, 2017, available at <https://tass.com/defense/953398>.

<sup>29</sup> “Russia Test Fires Sineva SLBM,” *Naval Technology.com*, April 27, 2011, available at <https://www.naval-technology.com/news/news117423-html/>.

<sup>30</sup> Pavel Podvig, “Liner SLBM explained,” *Russian Strategic Nuclear Forces.com*, October 4, 2011, available at [https://russianforces.org/blog/2011/10/liner\\_slbm\\_explained.shtml](https://russianforces.org/blog/2011/10/liner_slbm_explained.shtml).

<sup>31</sup> “Guaranteed defeat of enemy infrastructure: how the Sarmat ballistic missile will enhance the combat potential of the Strategic Missile Forces,” *Teller Report*, December 16, 2019, available at <https://www.tellerreport.com/news/2019-12-16---guaranteed-defeat-of-enemy-infrastructure--how-the-sarmat-ballistic->

Russia's main official news agency, says it can carry "at least 15 warheads."<sup>32</sup> There is no way numbers this high can fit into the declared Russian warhead level of 1,515 or the New START limit of 1,550.<sup>33</sup>

Hans M. Kristensen and Matt Korda of the Federation of American Scientists present the supposed force loads of Russian strategic missiles without any sourcing.<sup>34</sup> These numbers have no evidentiary value on the compliance certification issue. They appear to be a combination of numbers based on **assumed** compliance by Russia with the New START Treaty and numbers derived from very old Soviet START Treaty accountability data for legacy Soviet ICBMs and SLBMs applied to the new Russian replacement systems, which are far more capable. Most of the Soviet numbers have no relationship to what the Russian leaders have said about their new systems (discussed above), which carry many more warheads, what Russian defense industrial sources have said about the new or improved missiles they are producing and numbers that appear in Russian media for the new and improved missiles.

Indeed, there are many reports in Russian state media and official statements by senior Russian officials that clearly suggest Russia is already in violation of the New START Treaty. These reports and statements have never

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missile-will-enhance-the-combat-potential-of-the-strategic-missile-forces-SkxuY8bHRB.html.

<sup>32</sup> "Formidable Sarmat: Satan's successor that can pierce any defense," TASS, October 25, 2016, available at <https://tass.com/defense/908575>.

<sup>33</sup> U.S. Department of State, "New START Treaty Aggregate Numbers of Strategic Offensive Arms of the United States and the Russian Federation, February 2011 - March 2022" Fact Sheet, available at March 1, 2022, available at <https://www.state.gov/new-start-treaty-aggregate-numbers-of-strategic-offensive-arms-of-the-united-states-and-the-russian-federation-february-2011-march-2022/>.

<sup>34</sup> Hans M. Kristensen and Matt Korda, "Nuclear Notebook: How many nuclear weapons does Russia have in 2022?," *Bulletin of the Atomic Scientists*, February 23, 2022, available at <https://thebulletin.org/premium/2022-02/nuclear-notebook-how-many-nuclear-weapons-does-russia-have-in-2022/>.

been addressed in a Department of State noncompliance report.

For example, a December 2019 statement by Russian Strategic Missile Forces Commander Colonel General Sergei Karakayev implied that Russia had over 3,300 deployed strategic nuclear warheads.<sup>35</sup> Even with the bomber weapon undercounting rule, they cannot have that many consistent with their New START Treaty data declarations without violating the treaty. He has repeatedly stated that Russia has 400 ICBMs with warheads on “combat duty,” which can only be achieved by violating the New START Treaty in light of the declared Russian deployed missile and bomber force numbers (508 to 527)<sup>36</sup> in the time period of Karakayev’s statements. Because of this, Russia cannot have more than about 300 ICBMs “with warheads on combat duty.”<sup>37</sup> If there are 400 deployed Russian ICBMs on “combat alert,” this suggests a covert force of mobile ICBMs. However, monitoring Russian mobile ICBM production ended with the demise of the original START Treaty in 2009. Such a covert force could

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<sup>35</sup> “FACTBOX – Strategic Missile Forces Day in Russia,” *Sputnik*, December 17, 2018, available at [https://www.realcleardefense.com/articles/2020/04/23/russian\\_modernization\\_of\\_its\\_icbm\\_force\\_115224.html](https://dialog.proquest.com/professional/professionalnewsstand/docview/2157472585/fulltext/170A13075F1754EEEE6/1?accountid=155509&site=professionalnewsstand&t:ac=170A13075F1754EEEE6/1&t:cp=maintain/resultcitationblocksbrief&t:zoneid=transactionalZone_1713baf472d; Mark B. Schneider, “Russian Modernization of Its ICBM Force,” <i>Real Clear Defense</i>, April 23, 2020, available at <a href=).

<sup>36</sup> U.S. Department of State, “New START Treaty Aggregate Numbers of Strategic Offensive Arms,” Fact Sheet, January 1, 2017, available at <https://2009-2017.state.gov/t/avc/rls/2016/266384.htm>; U.S. Department of State, “New START Treaty Aggregate Numbers of Strategic Offensive Arms,” Fact Sheet, September 28, 2021, available at <https://www.state.gov/new-start-treaty-aggregate-numbers-of-strategic-offensive-arms/>; Pavel Podvig, “Russian strategic forces in January 2014,” *Russian Strategic Nuclear Forces.com*, January 15, 2014, available at [https://russianforces.org/blog/2014/01/russian\\_strategic\\_forces\\_in\\_20.shtml](https://russianforces.org/blog/2014/01/russian_strategic_forces_in_20.shtml).

<sup>37</sup> Kristensen and Korda, “Nuclear Notebook: How many nuclear weapons does Russia have in 2022?,” op. cit.

have been created by under reporting Russian mobile ICBM production by 5 or 10 missiles and launchers per year and taking the necessary concealment measures. Indeed, there is historical precedent for Soviet cheating with mobile ballistic missiles.<sup>38</sup>

During the Ukraine war, Yuri Borisov, then-Deputy Prime Minister with the Defense portfolio, stated that "...the Kh-101 airborne missile [is] carried by the Sukhoi Su-30 and Su-35 fighter-bombers."<sup>39</sup> This is not permissible under the New START Treaty because the Kh-101 has an official range of 4,500-km and, according to President Putin and the Russian Defense Ministry, is capable of carrying nuclear warheads.<sup>40</sup> Therefore, to be consistent with the New START Treaty, the Su-30 and Su-35 would need to be declared heavy bombers, which has obviously not been done. Prior to their aircraft losses in Ukraine, Russia had well over two hundred Su-30s and Su-35s, which would put them in violation of all three limits in the New START Treaty.<sup>41</sup> Not surprisingly, the State Department compliance reports ignore this issue.

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<sup>38</sup> "Soviet Noncompliance With Arms Control Agreements," op. cit.; U.S. Department of State, "Case Study: SS-23 Missiles in Eastern Europe," Fact Sheet, October 1, 2005, available at <https://20012009.state.gov/t/vci/rls/prsr/57238.htm>.

<sup>39</sup> "Top official explains why Russia hasn't run out of precision missiles in Ukraine," *RT*, April 19, 2022, available at <https://www.rt.com/russia/554134-borisov-interview-defense-industry/>. (Emphasis in original).

<sup>40</sup> "Russian weaponry proves efficient in complex Syrian conditions – defense minister," *TASS*, October 6, 2016, available at <https://tass.com/defense/904494>; "Meeting with Defence Minister Sergei Shoigu," *Kremlin.ru*, December 8, 2015, available at <http://en.kremlin.ru/events/president/news/50892>; "In the course of the last 24 hours, aircraft of the Russian Aerospace Forces have performed 82 combat sorties engaging 204 terrorist objects in Syria," Defense Ministry of the Russian Federation, December 9, 2015, available at [http://eng.mil.ru/en/news\\_page/country/more.htm?id=12071355@egNews](http://eng.mil.ru/en/news_page/country/more.htm?id=12071355@egNews); "Meeting with Defence Minister Sergei Shoigu," *Kremlin.ru*, December 8, 2015, available at <http://en.kremlin.ru/events/president/news/50892>.

<sup>41</sup> Alexander Mamedov, "Russia's Most Capable Fighter," *Combat Aircraft*, June 2022, p. 50.; Alexander Mamedov, "Su-34 Fullback," *Combat Aircraft*, June 2022, p. 58.

Borisov's revelation is not completely new. In 2012, then-Commander of the Russian Air Force Colonel General Alexander Zelin stated that the Su-34 long-range strike fighter would be given "...long-range missiles...Such work is under way and I think that it is the platform that can solve the problem of increasing nuclear deterrence forces within the Air Force strategic aviation."<sup>42</sup> While he did not mention the missile type, the Kh-101 is the only credible option.

*Rossiyskaya Gazeta*, the official newspaper of the Russian Government, reported that the new version of the Backfire (Tu-22M3M) bomber can carry the Kh-101 and the Kh-555, both long-range air-launched cruise missiles.<sup>43</sup> The Kh-555 is a long-range (600-km or above) cruise missile reported in state-run *Sputnik News* to be nuclear-capable.<sup>44</sup> The Backfire is not a heavy bomber under the New START Treaty; hence, it has the same compliance issue as that involving the Su-30, the Su-34 and the Su-35.

There is another Backfire bomber compliance issue with the New START Treaty involving a long-range nuclear-capable cruise missile. The Backfire bomber has long been associated with the near hypersonic Kh-32 which is listed as

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<sup>42</sup> Russian strategic aviation to be reinforced with Su-34 frontline bombers," *Interfax-AVN*, March 19, 2012. Translated by World News Connection. (No longer available on Internet).

<sup>43</sup> "Russia: First Tu-22M3M bomber due 2018, 30 to be upgraded," *BBC Monitoring Former Soviet Union*, May 21, 2017, available at [https://dialog.proquest.com/professional/professionalnewsstand/docview/1900529954/fulltext/181B1B3291A8B1488C/1?accountid=155509&accountid=155509&site=professionalnewsstand&t:ac=181B1B3291A8B1488C/1&t:cp=maintain/resultcitationblocksbrief&t:zoneid=transationalZone\\_258a2ca8dd0efe](https://dialog.proquest.com/professional/professionalnewsstand/docview/1900529954/fulltext/181B1B3291A8B1488C/1?accountid=155509&accountid=155509&site=professionalnewsstand&t:ac=181B1B3291A8B1488C/1&t:cp=maintain/resultcitationblocksbrief&t:zoneid=transationalZone_258a2ca8dd0efe).

<sup>44</sup> "PROTOCOL TO THE TREATY BETWEEN THE UNITED STATES OF AMERICA AND THE RUSSIAN FEDERATION ON MEASURES FOR THE FURTHER REDUCTION AND LIMITATION OF STRATEGIC OFFENSIVE ARMS," available at <https://2009-2017.state.gov/documents/organization/140047.pdf>; "Winged Snipers: Best of the Best of Russia's Ballistic and Cruise Missiles," *Sputnik News*, December 23, 2017, available at <https://sputniknews.com/20171223/russian-air-launched-ballistic-cruise-missiles-1060272064.html>.

a nuclear-capable ALCM in the 2018 *Nuclear Posture Review* report.<sup>45</sup> Reports of the Backfire launching the Kh-32 go back as far as 2013. TASS, Russia's main official news agency, says the range of the of the Kh-32 is 1,000-km.<sup>46</sup> State-run *Sputnik News* confirms this and says, "...the Kh-32 can carry either conventional or nuclear munitions."<sup>47</sup> State-run *Russia Beyond the Headlines* also says its range is 1,000-km and it can be armed "...with a nuclear or conventional 500-kilogram (1,102 lb.) warhead and hit targets within a few yards."<sup>48</sup> Once again, this issue has not been addressed in a State Department noncompliance report.

Reports to the Congress on noncompliance issues are a legal requirement under the Arms Control and Disarmament Act, as amended (22 U.S.C. § 2593a). This requirement has frequently been ignored. And the certification of Russian compliance with New START is a legal requirement under the Senate's New START Treaty Resolution Of Advice And Consent To Ratification. It is a Presidential certification that has been delegated to the U.S. Department of State. It cannot be made in an arbitrary or capricious manner, on the basis of political expediency, White House ideology or Simple acceptance of unverified Russian data.

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<sup>45</sup> Margot van Loon, Dr. Larry Wortzel, and Dr. Mark B. Schneider, *Hypersonic Weapons*, American Foreign Council, May 2019, available at [https://www.afpc.org/uploads/documents/Defense\\_Technology\\_Briefing\\_-\\_Issue\\_18.pdf](https://www.afpc.org/uploads/documents/Defense_Technology_Briefing_-_Issue_18.pdf); Department of Defense, *Nuclear Posture Review* (Washington, D.C., US, Department of Defense, February 2018), available at <https://media.defense.gov/2018/Feb/02/2001872886/-1/-1/1/2018-NUCLEAR-POSTURE-REVIEW-FINAL-REPORT.PDF>.

<sup>46</sup> "Russia's upgraded strategic bomber to join Aerospace Force in October," TASS, May 15, 2018, available at <https://tass.com/defense/1004329>.

<sup>47</sup> "Winged Snipers: Best of the Best of Russia's Ballistic and Cruise Missiles," op. cit.

<sup>48</sup> Nikolai Litovkin, "New Russian cruise missiles to hit targets from the stratosphere," *Russia Beyond the Headlines*, August 30, 2016, available at [https://www.rbth.com/defence/2016/08/30/new-russian-cruise-missiles-to-hit-targets-from-the-stratosphere\\_625441](https://www.rbth.com/defence/2016/08/30/new-russian-cruise-missiles-to-hit-targets-from-the-stratosphere_625441).

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In 2014, the Obama Administration determined that Russia was violating the INF Treaty.<sup>49</sup> According to the 2018 *Nuclear Posture Review* report, “Russia is in violation of its international legal and political commitments that directly affect the security of others, including the 1987 Intermediate-Range Nuclear Forces (INF) Treaty, the 2002 Open Skies Treaty, and the 1991 Presidential Nuclear Initiatives. Its occupation of Crimea and direct support for Russia-led forces in Eastern Ukraine violate its commitment to respect the territorial integrity of Ukraine that they made in the 1994 Budapest Memorandum.”<sup>50</sup> The 2020 State Department arms control noncompliance report indicated that, “Russia has conducted nuclear weapons-related experiments that have created nuclear yield,” and that Russia did not notify these tests as required by the nuclear testing moratorium and the Threshold Test Ban Treaty.<sup>51</sup> The 2022 report confirmed these violations and stated Russia has “continued violation of its obligations to the United States under the CFE Treaty,” that, “The United States assesses that the Russian Federation (Russia) maintains an offensive BW program and is in violation of its obligations under Articles I and II of the BWC,”<sup>52</sup> and a

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<sup>49</sup> “US Department of State, *Adherence to and Compliance with Arms Control, Nonproliferation, and Disarmament Agreements and Commitments*, July 2014, available at <https://2009-2017.state.gov/t/avc/rls/rpt/2014/index.htm>.

<sup>50</sup> *Nuclear Posture Review*, op. cit.

<sup>51</sup> US Department of State, *Adherence to and Compliance with Arms Control, Nonproliferation, and Disarmament Agreements and Commitments*, June 2020, available at <https://www.state.gov/wp-content/uploads/2020/06/2020-Adherence-to-and-Compliance-with-Arms-Control-Nonproliferation-and-Disarmament-Agreements-and-Commitments-Compliance-Report-1.pdf>.

<sup>52</sup> US Department of State, *Adherence to and Compliance with Arms Control, Nonproliferation, and Disarmament Agreements and Commitments*, April 2022, available at <https://www.state.gov/wp-content/uploads/2022/04/2022Adherence-to-and-Compliance-with-Arms-Control-Nonproliferation-and-Disarmament-Agreements-and-Commitments.pdf>.

related 2022 State Department report says Russia is violating the Chemical Weapons Convention.<sup>53</sup>

In light of Russia's current behavior in Ukraine and its violation of multiple arms control agreements, is it reasonable to take Russia's assertions of compliance at face value and to assume that the New START Treaty is the only arms control treaty with which Putin is complying?

There has never before been such a monumental disconnect between U.S. nuclear arms control policy with Russia and the U.S. assessment of Putin's Russia and its actions. Unfortunately, it seems that the Biden Administration believes that the Putin regime is being honest and that the Russians are in compliance with New START. Absent on-site inspections, there can be no legitimate basis for such a legal certification. In August 2022, President Biden said in a statement relating to the Nuclear Non-Proliferation Review Conference that, "Today, my Administration is ready to expeditiously negotiate a new arms control framework to replace New START when it expires in 2026."<sup>54</sup> In the same statement he observed, "...Russia's brutal and unprovoked aggression in Ukraine has shattered peace in Europe and constitutes an attack on fundamental tenets of international order." A few days later Russia announced termination of New START Treaty inspections. It is incomprehensible that the Biden Administration was unaware of the impossibility of verifying Russia's compliance with the New START Treaty when it called for more arms control.

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<sup>53</sup> U.S. Department of State, "Condition (5)(C) Report on COMPLIANCE WITH THE TREATY ON CONVENTIONAL ARMED FORCES IN EUROPE," January 2022, available at <https://www.state.gov/wp-content/uploads/2022/04/Condition-5-c-Report.pdf>.

<sup>54</sup> "President Biden Statement Ahead of the 10<sup>th</sup> Review Conference of the Treaty on the Non-Proliferation of Nuclear Weapons," The White House, August 1, 2022, available at <https://www.whitehouse.gov/briefing-room/statements-releases/2022/08/01/president-biden-statement-ahead-of-the-10th-review-conference-of-the-treaty-on-the-non-proliferation-of-nuclear-weapons/>.

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Certainly, no official during the ratification of the New START Treaty suggested that it was possible to monitor the number of nuclear warheads on Russian missiles reliably absent on-site inspections. In fact, just the opposite was true. Obama Administration officials talked about how important they were.<sup>55</sup> The near-term deployment of the new Sarmat heavy ICBM creates entirely new monitoring and verification problems. Yet, Russia appears completely unwilling to resume inspections. Sadly, the underlying reality is that the Biden Administration is not really interested in finding Russia in violation of the New START Treaty, as doing so would call into question its entire emphasis on the importance of arms control. Rather, in proposing a new round of arms control negotiations, the Biden Administration is going down a familiar rabbit hole – pursuing arms control for the sake of arms control.

The United States has been down this road before. Absent effective verification and serious consequences for non-compliance, another arms control agreement will do nothing to serve U.S. national security interests. In so doing, Americans risk being lulled into a false sense of security with possibly catastrophic consequences.

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<sup>55</sup> SEN. CARL LEVIN HOLDS A HEARING ON THE NEW START TREATY,” *Political Transcript Wire*, June 17, 2010, available at [https://dialog.proquest.com/professional/professionalnewsstand/docview/501792958/fulltext/181C50DC7F6115641F3/1?accountid=155509&accountid=155509&site=professionalnewsstand&t:ac=181C50DC7F6115641F3/1&t:cp=maintain/resultcitationblocksbrief&t:zoneid=transactionalZone\\_2654cd14911e91](https://dialog.proquest.com/professional/professionalnewsstand/docview/501792958/fulltext/181C50DC7F6115641F3/1?accountid=155509&accountid=155509&site=professionalnewsstand&t:ac=181C50DC7F6115641F3/1&t:cp=maintain/resultcitationblocksbrief&t:zoneid=transactionalZone_2654cd14911e91); “The New START Treaty (Treaty Doc. 111-5): The Negotiations,” Senate Foreign Relations Committee, June 15, 2010 available at <https://www.foreign.senate.gov/hearings/the-new-start-treaty-treaty-doc-111-5-the-negotiations>.



## The Death of the New START Treaty \*

In December 2019, Russian Ambassador to the United States Anatoly Antonov and former Undersecretary of State for Arms Control and International Security Rose Gottemoeller, co-authored an article on the New START Treaty which claimed that the Treaty was “The Gold Standard” of arms control and ended with the suggestion that the U.S. Government should adopt the Russian position: “Russian President Vladimir Putin has indicated that the Russian side is ready to extend New START without any preconditions. There is nothing stopping U.S. President Donald Trump from immediately announcing the same.”<sup>1</sup> The Antonov-Gottemoeller recommendation implicitly rejected the Trump Administration’s attempt to enhance the Treaty’s limitations and its verification regime. This is exactly what the Biden Administration did when it extended New START without any review of the issues involved.

In 2020, Rose Gottemoeller made it clear that the on-site inspection regime was central to New START verification, stating that, “...we discarded the counting rules in favor of confirming declared warheads on the front of missiles through reciprocal inspections; in fact, we did not need telemetry measures to confirm compliance with the warhead limits in the new treaty....”<sup>2</sup> In 2022, Russia

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\* Original publication: Mark B. Schneider, “The Death of the New START Treaty,” *Information Series*, No. 560 (Fairfax, VA: National Institute Press, August 7, 2023).

<sup>1</sup> Anatoly Antonov and Rose Gottemoeller, “Keeping Peace in the Nuclear Age – Why Washington and Moscow Must Extend the New START Treaty,” *Foreign Affairs*, April 29, 2020, available at <https://www.foreignaffairs.com/articles/united-states/2020-04-29/keeping-peace-nuclear-age>.

<sup>2</sup> Rose Gottemoeller, “The New START Verification Regime: How Good Is It?,” *Bulletin of the Atomic Scientists*, May 21, 2020, available at

refused to resume New START Treaty on-site inspections. To date, we have not had any on-site inspections for over three years with no end in sight.

In November 2022, Rose Gottemoeller declared our negotiations on New START with Russia had “quietly born fruit” and “that at a BCC [Bilateral Consultative Commission] meeting in Cairo meeting participants can ensure that on-site inspections under New START resume, but in a way that will not interrupt the operating tempo of the three legs of the strategic nuclear forces—intercontinental ballistic missiles, submarines, and bombers.”<sup>3</sup> Russia cancelled the meeting.

In reality, on-site inspections have little impact on the “operating tempo” of strategic nuclear forces. Rose Gottemoeller, while acknowledging that our strategic force elimination procedures were Treaty compliant, suggested that we would address a list of Russian demands regarding changes they desired. She stated, “The Russians, for example, have long complained about the ‘conversion or elimination’” procedures.<sup>4</sup> She did not mention that the Russian demands for Treaty changes related to removal from accountability provisions would cost the United States several Trident submarines and most of our nuclear bomber force *or a comparable reduction in our ICBMs*. This would have been in addition to what the Treaty had already cost us. According to then-STRATCOM Commander Admiral Charles Richard, “... [U.S. nuclear] weapons are

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<https://thebulletin.org/2020/05/the-new-start-verification-regime-how-good-is-it/>.

<sup>3</sup> Rose Gottemoeller, “Resuming New START inspections must be a critical goal of upcoming US-Russia talks,” *Bulletin of the Atomic Scientists*, November 23, 2022, available at [https://thebulletin.org/2022/11/resuming-new-start-inspections-must-be-a-critical-goal-of-upcoming-us-russia-talks/?utm\\_source=Newsletter&utm\\_medium=%20Email&utm\\_campaign=MondayNewsletter11282022&utm\\_content=NuclearRisk\\_ResumingNewSTARTInspections\\_11232022](https://thebulletin.org/2022/11/resuming-new-start-inspections-must-be-a-critical-goal-of-upcoming-us-russia-talks/?utm_source=Newsletter&utm_medium=%20Email&utm_campaign=MondayNewsletter11282022&utm_content=NuclearRisk_ResumingNewSTARTInspections_11232022).

<sup>4</sup> *Ibid.*

‘operationally unavailable’ because of treaty constraints, such as provisions of the New START treaty with Russia.”<sup>5</sup>

In his February 2023 State of the Nation Address, President Putin announced Russia was, “...suspending its participation in the strategic offensive arms treaty.”<sup>6</sup> On March 15, 2023, the State Department announced that Russia was in “noncompliance” with the New START Treaty. It said: 1) “Russia’s noncompliance with the New START Treaty, and its claimed suspension of the treaty, are unfortunate and irresponsible steps.”; 2) “Russia is refusing to allow inspections.”; 3) “Russia refuses to meet in the treaty’s implementation body, the Bilateral Consultative Commission (BCC), despite repeated U.S. requests. The treaty requires both sides meet in the BCC.”; and, 4) “Russia has stopped providing its treaty-mandated notifications.”<sup>7</sup>

The arms control enthusiast community is now suggesting we do not really need inspections to verify the New START Treaty warhead numbers. According to Gottemoeller, this is because we get data exchange and notifications from Russia (which have now stopped) and we verify the data by using our “own national technical means [NTM] (satellites, reconnaissance aircraft, radars, etc.) – the United States has been able to keep a close eye on developments in the Russian strategic nuclear forces.”<sup>8</sup> The Department of State is also taking the line that the absence

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<sup>5</sup> Bill Gertz, “EXCLUSIVE: China building third missile field for hundreds of new ICBMs,” *The Washington Times*, August 12, 2021, available at <https://www.washingtontimes.com/news/2021/aug/12/china-engaged-breath-taking-nuclear-breakout-us-str/>.

<sup>6</sup> “Presidential Address to Federal Assembly,” *The Kremlin.ru*, February 21, 2023, available at <http://en.kremlin.ru/events/president/news/70565>.

<sup>7</sup> U.S. Department of State, “Russian Noncompliance with and Invalid Suspension of the New START Treaty,” Fact Sheet (Washington, D.C.: U.S. Department of State, Office of the Spokesperson, March 15, 2023), available at <https://www.state.gov/russian-noncompliance-with-and-invalid-suspension-of-the-new-start-treaty/>.

<sup>8</sup> Gottemoeller, “Resuming New START inspections must be a critical goal of upcoming US-Russia talks,” *op. cit.*

of on-site inspections is of little consequence, even asserting that, "...the United States assesses that Russia did not engage in significant activity above the Treaty limits in 2022. The United States also assesses that Russia was likely under the New START warhead limit at the end of 2022."<sup>9</sup>

In reality, this is little more than wishful thinking. The New START Treaty clearly contains the weakest verification regime since the "fatally flawed" 1979 SALT II Treaty. Former Assistant Secretary of State for Verification, Compliance, and Implementation Paula DeSutter observed that the verification regime of the New START Treaty is so poorly designed that its verifiability is "very, very low."<sup>10</sup> This suggested inadequate verification under the terms of New START, but the reality is worse with the complete absence of on-site inspections. The New START Treaty does not contain the previous START Treaty attribution rules which allowed NTM data to be used to count deployed warheads. It also lacks the START telemetry regime and many types of START Treaty inspections.<sup>11</sup> With the demise of the START Treaty in 2009, the United States lost continuous monitoring of mobile ICBM production and the

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<sup>9</sup> U.S. Department of State, "Report to Congress on Implementation of the New START Treaty Pursuant to paragraph (a)(10) of the Senate's Resolution of Advice and Consent to Ratification of the New START Treaty (Treaty Doc. 111-5) New START Treaty Annual Implementation Report," (Washington, D.C.: U.S. Department of State, 2023), p. 6, available at <https://www.state.gov/wp-content/uploads/2023/01/2022-New-START-Implementation-Report.pdf>.

<sup>10</sup> "Paula A. DeSutter on Strategic Arms Reduction Treaty (START II)," The Heritage Foundation, 2010, available at <https://www.youtube.com/watch?v=AFdEAZt7Glw>.

<sup>11</sup> "New START: Potemkin Village Verification" (Washington, D.C.: The Heritage Foundation, June 24, 2010), available at <http://www.heritage.org/research/reports/2010/06/new-start-potemkin-villageverification?query=New+START:+Potemkin+Village+Verification.> "Statement of Paula A. DeSutter Before the House Armed Services Subcommittee on Strategic Forces INF Treaty Withdrawal and the Future of Arms Control," February 26, 2019, p. 24, available at <https://docs.house.gov/meetings/AS/AS29/20190226/108944/HHRG-116-AS29-Wstate-DeSutterP-20190226.pdf>.

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verification regime that monitored the actual destruction of mobile ICBMs and their launchers.<sup>12</sup> Add to this Putin's complete termination of the New START Treaty verification regime, and the resulting situation is about as bad as it can get.

Without on-site inspections for over three years, the United States cannot verify the number of warheads deployed on Russian missiles. The absence of counting rules (sometimes called attribution rules) in the New START Treaty makes it impossible for NTM data to be used to count deployed warheads. If the United States could verify the number of deployed warheads without on-site inspections, it would never have had an on-site inspection regime requirement in the previous START and INF Treaties; it was an enormous challenge to secure Soviet agreement with those provisions. Satellites, reconnaissance aircraft, radars and other NTM systems provide much useful information about the potential of Russian missiles, but they cannot convey how many warheads are actually deployed on them. NTM cannot reveal whether downloaded Russia missiles have been covertly uploaded during the more than three years without on-site inspections – despite State Department claims.

Even before Putin's "suspension" of the New START Treaty, the only thing left of its severely deficient original verification regime was the prohibition on interference with NTM of verification and the very limited prohibition of concealment which did not apply to "cover or concealment practices at ICBM bases..."<sup>13</sup> Today, there is literally nothing left of the verification regime.

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<sup>12</sup> "New START: Potemkin Village Verification," *op. cit.*

<sup>13</sup> "Treaty Between the United States of America and the Russian Federation on Measures for Further Reduction and Limitation of Strategic Offensive Arms" (Washington, D.C.: U.S. Department of State, 2010), p. 13, available at <https://2009-2017.state.gov/documents/organization/140035.pdf>.

If one reads the Biden Administration's 2022 and 2023 reports on arms control compliance, one will read that Russia is violating all of the arms control treaties except New START.<sup>14</sup> This year the State Department has stated, "...the United States cannot certify the Russian Federation to be in compliance with the terms of the New START Treaty."<sup>15</sup> The long history of Soviet/Russian arms control violations suggests that today Russia is exploiting the lack of inspections and "suspension" of the Treaty to increase its nuclear forces.

Russia obviously did not terminate New START Treaty inspections because of Covid 19 as claimed (the pandemic did not, for example, prevent Russia from invading Ukraine), or the cost of airline tickets. Pavel Luzin, a Jamestown Institute Russia analyst, has pointed out the "...evidence suggests that Russia did not intend to abide by the New START Treaty after its full-scale invasion of Ukraine, exactly one year ago."<sup>16</sup> This appears to be correct. In September 2022, the Russian space agency indicated it was not planning a Treaty-required demonstration of the

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<sup>14</sup> U.S. Department of State, *Adherence to and Compliance with Arms Control, Nonproliferation, and Disarmament Agreements and Commitments* (Washington, D.C.: U.S. Department of State, July 2022), available at <https://www.state.gov/wp-content/uploads/2022/04/2022-Adherence-to-and-Compliance-with-Arms-Control-Nonproliferation-and-Disarmament-Agreements-and-Commitments-1.pdf>; U.S. Department of State, *Adherence to and Compliance with Arms Control, Nonproliferation, and Disarmament Agreements and Commitments* (Washington, D.C.: U.S. Department of State, April 2023), available at <https://www.state.gov/wp-content/uploads/2023/04/13APR23-FINAL-2023-Treaty-Compliance-Report-UNCLASSIFIED-UNSORCED.pdf>.

<sup>15</sup> "Report to Congress on Implementation of the New START Treaty Pursuant to paragraph (a)(10) of the Senate's Resolution of Advice and Consent to Ratification of the New START Treaty (Treaty Doc. 111-5) New START Treaty Annual Implementation Report," op. cit., p. 6.

<sup>16</sup> Pavel Luzin, "Why Did Russia Suspend the New START Treaty?" *Eurasia Daily Monitor* (Volume 20, Issue 33), February 24, 2023, available at <https://jamestown.org/program/why-did-russia-suspend-the-new-start-treaty/>.

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new Sarmat heavy ICBM until February 2024.<sup>17</sup> The “suspension” of New START by Putin opens the door to higher Russian force levels while the United States chooses to continue to comply with the New START Treaty.

The official Russian position is that it is not increasing its force above the New START Treaty limits but this is very unlikely in light of the value the Russian leadership places on nuclear weapons and the lack of any penalty for Treaty violations. Indeed, Russian Deputy Foreign Minister Sergei Ryabkov has hinted that they do not plan to abide by the Treaty limits. He said that suspension gives “...*additional possibilities* to ensure our own security...”<sup>18</sup> (Emphasis added.) This can only be true if Russia does not observe the Treaty limit on deployed warheads. Ryabkov made it clear that suspension would not end soon stating, “Until the United States changes its behavior, until we see signs of common sense in what they are doing in relation to Ukraine ... we see no chance for the decision to suspend New START to be reviewed or re-examined.”<sup>19</sup>

What are the implications if Russia began to upload its missiles covertly in late 2021 when Putin began his assault on the West or when it became clear in early 2022 that Russia would not secure a prompt victory against Ukraine? Putin’s subsequent behavior regarding the New START Treaty suggests he may have ordered covert uploading. Gottemoeller has said that without the New START Treaty “...the Russians could rapidly add several hundred more warheads, some say up to a thousand warheads, to their

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<sup>17</sup> “Roscosmos to demonstrate Sarmat ICBM to US inspectors by late February 2024,” *TASS*, September 23, 2022, available at <https://tass.com/society/1512509>.

<sup>18</sup> “Suspension of New START opens door for Russia to ensure its own security – diplomat,” *TASS*, April 4, 2023, available at <https://tass.com/politics/1599453>.

<sup>19</sup> “Russia will not rejoin nuclear treaty unless U.S. changes Ukraine stance - deputy foreign minister,” *Reuters*, March 2, 2023, available at <https://www.reuters.com/world/europe/russia-will-not-rejoin-nuclear-treaty-unless-us-changes-ukraine-stance-deputy-2023-03-01/>.

existing deployments of ICBMs without deploying a single additional missile.”<sup>20</sup> No inspections for over three years is roughly equivalent to no treaty at all since over that period Russia could have uploaded many of its missiles with little risk of detection and even less risk of a U.S. response.

The number of warheads the Russians could upload needs to be the subject of a separate analysis, but the Russians likely could have uploaded many more warheads than in Gottemoeller’s high estimate; the situation will get much worse when the Russians start deploying the new Sarmat heavy ICBM (reportedly capable of carrying up to 20 warheads)<sup>21</sup> supposedly this year.<sup>22</sup> Thanks to the 15 years of the original START Treaty’s verification regime, which provided technical data, demonstrations of Russian missiles for measurement, unencrypted telemetry, telemetry tapes and interpretive data and many more on-site inspections, the United States probably still has a reasonably good handle on the maximum number of nuclear warheads Russia can deploy today on its strategic nuclear forces that *are known*. That does not necessarily include the full size of Russia’s mobile ICBM force.

There is a range of Russian New START Treaty compliance issues involving placing long-range nuclear cruise missiles on aircraft other than heavy bombers, which creates Treaty violations. Our main source for this

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<sup>20</sup> “US May Lose Nuclear Parity With Russia Without START - Ex-NATO Deputy Chief,” *Sputnik*, December 6, 2019, available at <https://dialog.proquest.com/professional/professionalnewsstand/docview/2321933850/>. Full text/16E4CBE4E1D213FDCE5/3?accountid=155509&site=professionalnewsstand&t:ac=16E4CBE4E1D213FDCE5/1&t:cp=maintain/resultcitationblocksbrief&t:zoneid=transactionalZone\_16ee73d1b23.

<sup>21</sup> “Formidable Sarmat: Satan’s successor that can pierce any defense,” *TASS*, October 25, 2016, available at <http://tass.com/defense/908575>.

<sup>22</sup> “Russia plans to deploy 22 Yars, Avangard, Sarmat ICBM launchers in 2023 – Shoigu,” *TASS*, December 21, 2022, available at <https://tass.com/defense/1554023>.

information is Russian state media which has no real legal understanding of the content of the New START Treaty and, hence, sometimes reports activities that indicate Treaty violations. Thus far, the State Department appears to have completely ignored this information in its annual noncompliance reports.

If Russia puts long-range (i.e., 600-km or greater range) nuclear air-launched cruise missiles (ALCMs) on non-heavy bombers (fighters, light bombers or medium bombers), it turns them into heavy bombers under the New START Treaty and *de facto* puts Russia in violation of the numerical limits of the New START Treaty on deployed warheads and deployed delivery vehicles. This is one of the reasons the United States does not have nuclear ALCMs on its fighters.

In 2022, Yury Borisov, then-Russia's Deputy Prime Minister in charge of defense procurement, stated in an interview with RT (Russian state media) that the Kh-101 long-range ALCM was "*carried by the Sukhoi Su-30 and Su-35 fighter-bombers. We have a wide range of air-to-surface munitions with a different effective range and power to hit different types of targets. Because of that, Russia dominates the sky in Ukraine. Russia's Air Force ensures this with its efficient air-launched weapons.*" (Emphasis in the original). Perhaps subsequently realizing the significance of this statement as indicating Russian violation of New START limits, RT has recently removed this statement from the text of the Borisov interview but, to its credit, acknowledges it: "*This article has been amended in regards to a quote by Yury Borisov on the missiles carried by the Sukhoi Su-30 and Su-35 fighter-bombers.*"<sup>23</sup> (Emphasis in the original).

The problem is that in December 2015 President Vladimir Putin declared the Kh-101 "...can be equipped

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<sup>23</sup> "Top official explains why Russia hasn't run out of precision missiles in Ukraine," RT, April 19, 2022, available at <https://www.rt.com/russia/554134-borisov-interview-defense-industry/>.

either with conventional or special nuclear warheads.”<sup>24</sup> When briefing on the 2015 missile attacks against Syria, Russian Defense Ministry spokesman Major General Igor Konashenkov also said that the Kh-101 could carry conventional or nuclear warheads.<sup>25</sup> In August 2017, again speaking about Kh-101 strikes against Syria, he repeated his statement that the Kh-101 carries both conventional and nuclear warheads.<sup>26</sup> President Putin and the Russian Ministry of Defense (MoD) have said the range of the Kh-101 is 4,500 km.<sup>27</sup> That turns every Su-30 and Su-35 fighter into a heavy bomber under New START and puts Russia far above the deployed warhead and deployed delivery vehicle limits.

In 2012, the Commander of the Russian Air Force Colonel General Alexander Zelin stated that the Su-34 long-range strike fighter would be given “long-range missiles...Such work is under way and I think that it is the platform that can solve the problem of increasing nuclear deterrence forces within the Air Force strategic aviation.”<sup>28</sup>

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<sup>24</sup> “Meeting with Defence Minister Sergei Shoigu,” *Kremlin.ru*, December 8, 2015, available at <http://en.kremlin.ru/events/president/news/50892>.

<sup>25</sup> “In the course of the last 24 hours, aircraft of the Russian Aerospace Forces have performed 82 combat sorties engaging 204 terrorist objects in Syria,” Defense Ministry of the Russian Federation, December 9, 2015, available at [http://eng.mil.ru/en/news\\_page/country/more.htm?id=12071355@egNew](http://eng.mil.ru/en/news_page/country/more.htm?id=12071355@egNew).

<sup>26</sup> “Strategic Tu-95MS bombers destroyed the ISIS militants’ command post and storages in Syria with a missile attack, Defense ministry of the Russian Federation,” Russian Federation Ministry of Defense, August 5, 2017, available at <http://eng.mil.ru/en/newspage/country/more.htm?id=12132186@egNews>.

<sup>27</sup> “Meeting of Commission for Military Technical Cooperation with Foreign States,” *Kremlin.ru*, July 6, 2017, available at <http://en.kremlin.ru/events/president/news/54993>; “Meeting with Defence Minister Sergei Shoigu,” December 8, 2015, op. cit.

<sup>28</sup> “Russian strategic aviation to be reinforced with Su-34 frontline bombers,” *Interfax-AVN*, March 19, 2012, available at [https://dialog.proquest.com/professional/professionalnewsstand/docview/929029730/fulltext/17FF1D3AADB2F999288/1?accountid=155509&accountid=155509&site=professionalnewsstand&t:ac=17FF1D3AADB2F999288/1&t:cp=maintain/resultcitationblocksbrief&t:zoneid=transactionalZone\\_a83094dacd10f](https://dialog.proquest.com/professional/professionalnewsstand/docview/929029730/fulltext/17FF1D3AADB2F999288/1?accountid=155509&accountid=155509&site=professionalnewsstand&t:ac=17FF1D3AADB2F999288/1&t:cp=maintain/resultcitationblocksbrief&t:zoneid=transactionalZone_a83094dacd10f).

The compliance issue is the same as with the Su-30 and Su-35. The most important aspect of this statement is that it indicates Russia was doing this intentionally to achieve an illegal objective – increasing its strategic nuclear capability with fighter bombers, again in violation of New START limits.

In addition to the Kh-101 cruise missile, there are reports in the Russian press, including in Russian state media, that the Russian Kh-555 and Kh-32 long-range cruise missiles carried by the Backfire bomber are nuclear-capable.<sup>29</sup> If true, all the Backfire bombers become heavy bombers and about another 100 warheads and delivery vehicles are added to Russia's count under New START rules. These nuclear missiles can be used for strategic and non-strategic attacks although the Kh-32 would probably be exclusively non-strategic if launched from a Backfire bomber.

Since 2013, Colonel General Sergei Karakayev, Commander of the Strategic Missile Forces, has stated at least five times that Russia had approximately 400 ICBMs on "combat duty."<sup>30</sup> That is about 100 more than is possible

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<sup>29</sup> "Russia's upgraded strategic bomber to join Aerospace Force in October," TASS, May 15, 2018, available at <http://tass.com/defense/1004329>; "Tu-22M3 launching a Kh-32 cruise missile," June 27, 2013, available at <http://www.youtube.com/watch?v=UtsWTuZQhvQ>; David Cenciotti, "New image of a Russian Tu-22M Backfire with cruise missile emerges," *The Aviationist.com*, December 16, 2013, available at <http://theaviationist.com/2013/12/16/tu-22-cruise-missiles/>; "Winged Snipers: Best of the Best of Russia's Ballistic and Cruise Missiles," *Sputnik News*, December 23, 2017, available at <https://sputniknews.com/military/201712231060272064-russian-air-launched-ballistic-cruise-missiles/>.

<sup>30</sup> "Russian Strategic Missile Troops have about 400 ICBM launchers – commander," *BBC Monitoring Former Soviet Union*, December 17, 2013, available at [https://dialog.proquest.com/professional/professionalnewsstand/docview/1468597532/fulltext/185FE7A1B8353413EE9/1?accountid=155509&ccountid=155509&site=professionalnewsstand&t:ac=185FE7A1B8353413EE9/1&t:cp=maintain/resultcitationblocksbrief&t:zoneid=transactionalZone\\_66d61863325fea](https://dialog.proquest.com/professional/professionalnewsstand/docview/1468597532/fulltext/185FE7A1B8353413EE9/1?accountid=155509&ccountid=155509&site=professionalnewsstand&t:ac=185FE7A1B8353413EE9/1&t:cp=maintain/resultcitationblocksbrief&t:zoneid=transactionalZone_66d61863325fea); Franz-Stefan Gady, "Russian General: Russia Now Fields 400 Intercontinental Ballistic Missiles," *The Diplomat*, December 16, 2016, available at <https://thediplomat.com/2016/12/russian-general-russia-now-fields-400->

under Russia's declared New START force levels.<sup>31</sup> This suggests a covert mobile ICBM force or rapid reload. A covert mobile ICBM force is a Treaty violation while rapid reload is a circumvention.

In December 2019, Colonel General Karakayev implied that Russia has over 3,300 strategic nuclear warheads when he said that Russian strategic nuclear warheads had been reduced by two-thirds from Cold War levels.<sup>32</sup> (The peak Cold War level was about 10,000 warheads.)<sup>33</sup> To reach 3,300 warheads Russia would have to have been in violation of the 1,550 warhead limit in the New START Treaty.

It appears that not one of these issues has been addressed in a State Department noncompliance report. None of the numbers of extra nuclear warheads implied by these cheating scenarios is included in open source

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intercontinental-ballistic-missiles/.; "Ordnance; Russian Strategic Missile Forces comprise approx. 400 ICBMs - commander," *Interfax*, December 17, 2017, available at [https://dialog.proquest.com/professional/professionalnewsstand/docview/1963335174/fulltext/17078CBBA9F16F6BAD1/1?Accountid=155509&site=professionalnewsstand&t:ac=17078CBBA9F16F6BAD1/1&t:cp=maintain/resultcitationblocksbrief&t:zoneid=transactionalZone\\_171134a8a8a](https://dialog.proquest.com/professional/professionalnewsstand/docview/1963335174/fulltext/17078CBBA9F16F6BAD1/1?Accountid=155509&site=professionalnewsstand&t:ac=17078CBBA9F16F6BAD1/1&t:cp=maintain/resultcitationblocksbrief&t:zoneid=transactionalZone_171134a8a8a;).; "World's end at their fingertips: Russian troops in charge of ground-launched ICBMs celebrate 60th anniversary," *RT*, December 17, 2018, available at <https://www.rt.com/search?q=400+RVSN&type=>.

<sup>31</sup> Hans M. Kristensen & Matt Korda, "Russian nuclear weapons, 2022," *Bulletin of the Atomic Scientists*, February 25, 2022, pp. 99-100, available at <https://www.tandfonline.com/doi/full/10.1080/00963402.2022.2038907>.

<sup>32</sup> "FACTBOX - Strategic Missile Forces Day in Russia," *Sputnik*, December 17, 2018, available at <https://dialog.proquest.com/professional/professionalnewsstand/docview/2157472585/fulltext/170A13075F1754EEEB6/1?accountid=155509&site=professionalnewsstand&t:ac=170A13075F1+754EEEB6/1&t:cp=maintain/resultcit>.

<sup>33</sup> "Russia seeks to modernize strategic nuclear forces," *The Evening Sun*, November 29, 1993, available at [https://dialog.proquest.com/professional/professionalnewsstand/docview/306483054/fulltext/186511622CB39E69C2E/1?accountid=155509&accountid=155509&site=professionalnewsstand&t:ac=186511622CB39E69C2E/1&t:cp=maintain/resultcitationblocksbrief&t:zoneid=transactionalZone\\_55df2761870363](https://dialog.proquest.com/professional/professionalnewsstand/docview/306483054/fulltext/186511622CB39E69C2E/1?accountid=155509&accountid=155509&site=professionalnewsstand&t:ac=186511622CB39E69C2E/1&t:cp=maintain/resultcitationblocksbrief&t:zoneid=transactionalZone_55df2761870363).

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calculations of possible Russian strategic nuclear weapons levels. Thus, even our highest estimates of Russian strategic nuclear capability may be too low. Because of the legacy of the almost dead New START Treaty, threat assessment continues to be subject to apparent political calculations which virtually guarantee serious underestimates of Russian capability with grave implications for extended deterrence. If arms control is to have any chance of being meaningful, the United States can and must do better.



## No Extension of the New START Treaty? Trump Made the Right Decision \*

Vladimir Putin offered to extend the force limits of New START Treaty, an agreement Russia has been violating for years. In 2022, Moscow denied the United States Treaty-mandated on-site inspections rights and then illegally “suspended” the entire Treaty in 2023.<sup>1</sup> Putin’s offer was without *any* verification regime since his formulation was that “...Russia is prepared to continue observing the treaty’s central quantitative restrictions for one year after February 5, 2026.”<sup>2</sup> He made no reference to restoring the New START Treaty verification regime. This offer was reportedly initially under consideration by the Trump Administration.<sup>3</sup>

President Trump ultimately decided against the extension of the New START Treaty. He stated, “Rather than extend ‘NEW START’ (A badly negotiated deal by the United States that, aside from everything else, is being grossly violated), we should have our Nuclear Experts work on a new, improved, and modernized Treaty that can last long into the future.”<sup>4</sup>

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\* Original publication: Mark B. Schneider, “No Extension of the New START Treaty? Trump Made the Right Decision,” *Information Series*, No. 652 (Fairfax, VA: National Institute Press, February 19, 2026).

<sup>1</sup> U.S. Department of State, Office of the Spokesperson, “Russian Noncompliance with and Invalid Suspension of the New START Treaty,” *Fact Sheet*, June 1, 2023, <https://2021-2025.state.gov/russian-noncompliance-with-and-invalid-suspension-of-the-new-start-treaty/>.

<sup>2</sup> “Meeting with permanent members of the Security Council,” *Kremlin.ru*, September 22, 2025, <http://en.kremlin.ru/events/president/news/78051>.

<sup>3</sup> Pranay Vaddi, “Beware Russia Bearing Arms Control Gifts,” *Royal United Services Institute*, October 3, 2025, <https://www.rusi.org/explore-our-research/publications/commentary/beware-russia-bearing-arms-control-gifts>.

<sup>4</sup> President Donald Trump, *Truth Details*, February 5, 2026, <https://www.trumpstruth.org/statuses/36491>.

Secretary of State Marco Rubio observed:

Everything has its season though and yesterday, New START expired. Arms control advocates and many voices in the media have tried to cast the expiration as a sign that the United States is initiating a new nuclear arms race. These concerns ignore that Russia ceased implementing the New START treaty in 2023, after flouting its terms for years. A treaty requires at least two parties, and the choice before the United States was to bind itself unilaterally or to recognize that a new era requires a new approach. Not the same old START, but something new. A treaty that reflects that the United States could soon face not one, but two, nuclear peers in Russia and China.<sup>5</sup>

Under Secretary of State for Arms Control and International Security Thomas DiNanno pointed out:

Even if we could have legally extended the treaty, it would not have been beneficial for the United States—or the world—to do so. New START was signed in 2010 and its limits on warheads and launchers are no longer relevant in 2026 when one nuclear power is expanding its arsenal at a scale and pace not seen in over half a century and another continues to maintain and develop a vast range of nuclear systems unconstrained by New START's terms. An arms control architecture designed nearly two decades ago for New START does not allow the United States to credibly uphold both our strategic deterrence commitments to the American people

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<sup>5</sup> Marco Rubio, "The Next Era of Nuclear Arms Control," U.S. Department of State, February 6, 2026, <https://statedept.substack.com/p/the-next-era-of-nuclear-arms-control>.

and our extended deterrence commitments to our allies.<sup>6</sup>

The New START Treaty contained few limitations. In reality, despite what is often stated in the press, there were no “central qualitative restrictions” in the New START Treaty. There were only three limits in the entire New START Treaty—deployed warheads, deployed delivery vehicles and deployed and non-deployed delivery vehicles.<sup>7</sup> In 2017, President Trump reportedly “...told Putin the treaty was one of several bad deals negotiated by the Obama Administration, saying that New START favored Russia.”<sup>8</sup> He was correct. New START was the worst arms control treaty negotiated since the Reagan Administration.<sup>9</sup> As former Vice Chairman of the Russian Duma Defense Committee Aleksey Arbatov observed, “[New START] is essentially a treaty on limiting the American strategic forces.”<sup>10</sup> The only reduction in *deployed*

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<sup>6</sup> “United States Statement by Under Secretary of State for Arms Control and International Security The Honorable Thomas DiNanno to the Conference on Disarmament,” U.S. Mission to International Organizations in Geneva, February 6, 2026, <https://geneva.usmission.gov/2026/02/06/u-s-statement-at-the-conference-on-disarmament/>.

<sup>7</sup> U.S. Department of State, “New START Treaty,” June 1, 2023, <https://www.state.gov/new-start-treaty>.

<sup>8</sup> Jonathan Landay and David Rohde, “Exclusive - In call with Putin, Trump denounced Obama-era nuclear arms treaty: sources,” *Reuters*, February 9, 2017, <https://www.reuters.com/article/world/exclusive-in-call-with-putin-trump-denounced-obama-era-nuclear-arms-treaty-s-idUSKBN15O29Y/>.

<sup>9</sup> New START Working Group, “An Independent Assessment of New START,” The Heritage Foundation, April 30, 2010, <https://www.heritage.org/arms-control/report/independent-assessment-new-start>; and, New START Working Group, “New START: Potemkin Village Verification,” The Heritage Foundation, June 24, 2010, <https://www.heritage.org/arms-control/report/new-start-potemkin-village-verification>.

<sup>10</sup> Quoted in Keith B. Payne and Mark B. Schneider “The New START Treaty and Russia’s nuclear surge,” *The Washington Times*, October 21, 2015, <https://www.washingtontimes.com/news/2015/oct/21/keith-payne-mark-schneider-the-new-start-treaty-an/>.

strategic forces that existed when New START went into effect in February 2011 was made by the United States since the number of deployed Russian strategic nuclear warheads and deployed strategic delivery vehicles was under the New START Treaty limits when the Treaty went into effect in February 2011.<sup>11</sup> Since then, Russia has expanded its nuclear capabilities significantly.

Russian violations of arms control treaties are the norm. The bipartisan Congressional Strategic Posture Commission pointed out that, “Over the past 20 years, Russia has either violated or has failed to comply with nearly every major arms control treaty or agreement to which the United States is or was a party.”<sup>12</sup> Arms control without verification is exactly what Putin wants. While providing the veneer that Russia is a responsible nuclear power, Russia can cheat with little risk of consequences, while the United States abides by Treaty constraints. Extending New START: 1) would have rewarded Russia for its many arms control violations; 2) would have increased the risk of Russian nuclear weapons use in a European War, and 3) would certainly have been exploited by Putin to work against U.S. deployment of the Golden Dome missile defense system. When Putin made his offer to extend New START he said, “Particular attention must be directed towards Trump Administration plans to expand strategic components of its missile defence system, including preparations for the deployment of interceptors in outer space. We believe that the practical implementation of such destabilising measures could nullify our efforts to maintain

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11 Pavel Podvig, “Some New START data released,” *Russian Forces.org*, June 1, 2011, [https://russianforces.org/blog/2011/06/some\\_new\\_start\\_data\\_released.shtml](https://russianforces.org/blog/2011/06/some_new_start_data_released.shtml).

<sup>12</sup> Madelyn Creedon and Jon Kyl, et al., *America’s Strategic Posture* (Alexandria, VA: Institute for Defense Analyses, 2023), p. 84, <https://www.ida.org/research-and-publications/publications/all/a/am/americas-strategic-posture>.

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the status quo in the field of strategic offensive arms. We will respond appropriately in this case.”<sup>13</sup>

An additional worrisome concern had to be considered in any decision to extend the New START Treaty. Extension of New START would have increased the risk of a Chinese war against Taiwan. Extension of New START would have both reduced the U.S. ability to deter the conflict and result in the real possibility of Chinese nuclear escalation if the attack failed.<sup>14</sup> An invasion of Taiwan is a very difficult military undertaking and an invasion attempt just might fail, precipitating Chinese nuclear escalation.

China’s nuclear forces are not limited by any arms control treaty and China has consistently refused to participate in nuclear arms control negotiations. This position has just been reiterated.<sup>15</sup> When the first Trump Administration decided to pursue nuclear arms control bilaterally with Russia in 2018, China was assessed to have only 200 nuclear weapons and was (inaccurately) assessed not to plan on a major nuclear weapons expansion.<sup>16</sup> Today, this situation has completely changed because of the massive Chinese nuclear buildup.

Since 2022, China has been assessed by the Department of Defense (DoD-now the Department of War), as achieving near parity with the United States in the number of Chinese

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<sup>13</sup> “Meeting with permanent members of the Security Council,” op. cit.

<sup>14</sup> See Mark B. Schneider and Keith B. Payne, *Tailored Deterrence and Low-Cost Nuclear Weapons Upload*, Occasional Paper, Vol. 5, No. 6 (Fairfax, VA: National Institute Press, June 2025), <https://nipp.org/wp-content/uploads/2025/07/Vol.-5-No.-6.pdf>.

<sup>15</sup> “China says trilateral nuclear disarmament talks with US, Russia ‘unreasonable’,” *Reuters*, August 27, 2025, <https://www.reuters.com/world/china/china-says-trilateral-nuclear-disarmament-talks-with-us-russia-unreasonable-2025-08-27/>.

<sup>16</sup> Defense Intelligence Agency, *Nuclear Challenges - The Growing Capabilities of Strategic Competitors and Regional Rivals*, 2024, p. IX, [https://www.dia.mil/Portals/110/Images/News/Military\\_Powers\\_Publication/s/Nuclear\\_Challenges\\_2024.pdf](https://www.dia.mil/Portals/110/Images/News/Military_Powers_Publication/s/Nuclear_Challenges_2024.pdf).

nuclear weapons (1,500) by 2035.<sup>17</sup> Russia is already numerically ahead of the United States.<sup>18</sup> Extending New START would have been even more foolish in light of the revised assessment of China's nuclear capability that was made public by President Trump. In his October 2025 address at Quantico to American Generals and Admirals, President Trump revealed that in "five years they'll [the Chinese] be equal" in nuclear weapons.<sup>19</sup> This represents a striking increase from the Biden Administration's estimate of 1,000+ Chinese operational nuclear weapons in 2030 which was not revised since 2022 despite consistent annual underestimates of the growth of the Chinese nuclear inventory.<sup>20</sup> The new assessment implies that the growth rate of Chinese nuclear forces has about doubled (i.e., from 100 to 200 warheads per year).

This revised assessment is very important. It means that *every* previous assessment that relied on the Pentagon numbers was too low. Indeed, in 2025, before the new assessment, Dr. Keith Payne and this author pointed out that, "A straight-line projection of its [the Pentagon] estimates of Chinese nuclear warheads growth over the last several years (~100 a year) would result in 900+ Chinese

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<sup>17</sup> Mark B. Schneider, *Current and Projected Growth of China's Nuclear Arsenal*, *Occasional Paper*, Vol. 4, No. 10 (Fairfax, VA: National Institute Press, 2024) p. 1, <https://nipp.org/wp-content/uploads/2024/10/Vol.-4-No.-10.pdf>.

<sup>18</sup> Office of the Director of National Intelligence, *Annual Threat Assessment of the U.S. Intelligence Community* (Washington, D.C.: Office of the Director of National Intelligence, February 6, 2023), pp. 12, 14, <https://www.dni.gov/index.php/newsroom/reportspublications/reports-publications-2023/item/2363-2023-annual-threatassessment-of-the-u-s-intelligence-community>.

<sup>19</sup> "Transcript: President Trump's Remarks To Top Military Leaders in Quantico," *The Singju Post*, October 1, 2025, <https://singjupost.com/transcript-president-trumps-remarks-to-top-military-leaders-in-quantico/>.

<sup>20</sup> Schneider, *Current and Projected Growth of China's Nuclear Arsenal*, op. cit., pp 1-5.

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nuclear warheads in mid-2027.”<sup>21</sup> The newly released information suggests that the 900+ number should be increased by perhaps 200-300 nuclear warheads. Senator Tom Cotton (R-AR) has pointed out that “...given the Pentagon’s consistent underestimates in the past, it’s fair to assume that China will move even faster.”<sup>22</sup>

As this author has pointed out in previous analyses:

For the December 2024 DoD estimate of Chinese nuclear weapons to be correct *all* of the following assumptions would have to be true, which seems highly unlikely:

- All MIRVed Chinese missiles are deployed with only one warhead.
- China is building ICBM launchers faster than it is building missiles and building missiles faster than warheads.
- Less capable DF-31 ICBMs are being deployed in China’s new silos.
- China has only a handful of air-delivered nuclear warheads, no nuclear-capable cruise missiles and no nuclear-capable H-6K bombers.
- China lacks nuclear-capable short-range ballistic missiles.
- China has only a small number of non-strategic nuclear warheads.<sup>23</sup>

For the revised 2030 estimate to be accurate, almost all of these dubious assumptions would still have to be true.

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<sup>21</sup> Schneider and Payne, *Tailored Deterrence and Low-Cost Nuclear Weapons Upload*, op. cit., p. 3.

<sup>22</sup> Senator Tom Cotton, *Seven Things You Can’t Say About China* (New York: Harper Collins Publishers, 2025), p. 52.

<sup>23</sup> Mark B. Schneider, “Communist China’s 80th Anniversary Victory Parade: Nuclear Intimidation,” *Real Clear Defense*, September 22, 2025, [https://www.realcleardefense.com/articles/2025/09/22/communist\\_chinas\\_80th\\_anniversary\\_victory\\_parade\\_nuclear\\_intimidation\\_1136171.html](https://www.realcleardefense.com/articles/2025/09/22/communist_chinas_80th_anniversary_victory_parade_nuclear_intimidation_1136171.html).

Some MIRVing of Chinese strategic missile missiles would be possible but the number of warheads per missile would have to be lower than most estimates of their capacity. Moreover, this does not even take into account the projected growth in the number of Chinese nuclear-armed and nuclear-capable theater missiles over the next decade. The May 2025 Defense Intelligence Agency's Golden Dome threat assessment (really a briefing slide) projects an increase of 220 Chinese deployed ICBMs, at least 60 deployed SLBMs, and thousands each of nuclear-capable hypersonic and cruise missiles by 2035.<sup>24</sup> The Golden Dome threat assessment was incomplete since it provided no information about the Chinese nuclear-capable bomber force and theater-range ballistic missiles. Hence, at least some and probably much of the projected growth will happen by 2030. If history is precedent, Chinese and Russian nuclear forces will likely continue to grow beyond 2030 or even 2035.

The 2025 Heritage Foundation report by Robert Peters on "The U.S. Nuclear Arsenal of 2050: A Proposal for American Survival" uses the flawed Federation of American Scientists and the Biden Administration's estimates for the total Chinese nuclear force. Even so, he writes, "Russia and China combined by 2035 will maintain numerically more nuclear weapons than they have today and more than the United States will field for the foreseeable future.... This is not to say that the United States needs to field a strategic nuclear arsenal that is larger than the current combined arsenal of Russia and China, which should be roughly 3,100 operationally deployed strategic weapons and 5,100 total operationally deployed non-

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<sup>24</sup> Defense Intelligence Agency, "Golden Dome for America: Current and Future Missile Threats to the U.S. Homeland," May 13, 2025, [https://www.dia.mil/Portals/110/Documents/News/golden\\_dome.pdf](https://www.dia.mil/Portals/110/Documents/News/golden_dome.pdf).

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strategic weapons by 2035.”<sup>25</sup> In light of the revised assessment of Chinese nuclear weapons numbers, Peters’ analysis has been overtaken by events. Unfortunately, Chinese and Russian nuclear forces are growing so quickly that underestimates are a common occurrence even with the best threat assessments. In its last months in office, the Biden Administration finally recognized that Russia, China, and North Korea “...are all expanding and diversifying their nuclear arsenals at a breakneck pace—showing little or no interest in arms control.”<sup>26</sup> However, it enacted no apparent policies to address this growing threat.

Peters’ recommendation that the United States increase its nuclear warhead number to “a rough total of 4,625 operationally deployed weapons by 2050”<sup>27</sup> is a good one. However, it is likely to be closer to the number that the United States needs right now rather than what will be adequate in 2050. A 2012 Heritage Foundation study by Rebecca Heinrichs (a member of the Congressional Strategic Posture Commission) and Baker Spring concluded that the United States needed approximately 2,700-3,000 deployed *strategic* nuclear warheads because of the requirement to hold at risk adversary “...hardened and mobile targets with high confidence...”<sup>28</sup> This assessment was made nearly a decade before China’s massive nuclear missile buildup was discovered.

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<sup>25</sup> Robert Peters, “The U.S. Nuclear Arsenal of 2050: A Proposal for American Survival,” The Heritage Foundation, October 3, 2025, <https://www.heritage.org/sites/default/files/2025-10/BG3934.pdf>.

<sup>26</sup> “Adapting the U.S. Approach to Arms Control and Nonproliferation to a New Era,” The Arms Control Association, June 7, 2024, <https://www.armscontrol.org/2024AnnualMeeting/Pranay-Vaddi-remarks>.

<sup>27</sup> Peters, “The U.S. Nuclear Arsenal of 2050: A Proposal for American Survival,” *op. cit.*, p. 11.

<sup>28</sup> Rebecca Heinrichs and Baker Spring, “Deterrence and Nuclear Targeting in the 21st Century,” The Heritage Foundation, November 30, 2012, <https://www.heritage.org/node/12067/print-display>.

If the New START Treaty had been extended, irrespective of whether the United States needs 4,625 warheads or any number even close to it, it would be impossible to achieve this numerical objective. The Biden program for the nuclear weapons complex did not support 4,625 weapons. Even if it had, the maximum number of strategic nuclear warheads that would be deployable under New START would have been about 2,200.<sup>29</sup> Pranay Vaddi, who served as Special Assistant to the President and Senior Director for Arms Control, Disarmament, and Nonproliferation at the National Security Council under the Biden Administration, since leaving the White House has confirmed reports that the United States has only around 200 non-strategic nuclear weapons.<sup>30</sup> Worse yet, they are all bombs delivered by fighters that have limited range and little likely survivability against pre-emptive nuclear attack because they are not normally kept on alert.

What the United States needs is a non-strategic nuclear Triad. Under the current U.S. program of record, the United States will not have one. The Trump Administration has substantially increased funding for the nuclear ship-launched cruise missile (SLCM-N), but this system will not be operational until 2034.<sup>31</sup> Even then, it would only result in a Dyad. Moreover, the number of SLCM-N the Navy plans to procure is likely to be small. There is no program for any ground-launched nuclear-capable missile. As Keith Payne and I pointed out, “There are no U.S. nuclear weapons deployed in the Indo-Pacific region, giving Russia,

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<sup>29</sup> Schneider and Payne, *Tailored Deterrence and Low-Cost Nuclear Weapons Upload*, op. cit., p. x.

<sup>30</sup> Vaddi, “Beware Russia Bearing Arms Control Gifts,” op. cit.

<sup>31</sup> Congressional Research Service, “Nuclear-Armed Sea-Launched Cruise Missile (SLCM-N),” Report IF12084, September 19, 2025, file:///C:/Users/anncr/Downloads/IF12084.13-1.pdf.

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China and North Korea dangerous coercive leverage as they expand, diversify and improve their nuclear capabilities.”<sup>32</sup>

In the short- to mid-term, only the upload of more U.S. strategic nuclear missile weapons can significantly increase U.S. nuclear capability.<sup>33</sup> The available studies have concluded that upload would provide the United States with a numerical advantage in strategic nuclear forces.<sup>34</sup> For example, the Federation of American Scientist (FAS) analysis credits the United States with an upload capability, absent New START constraints, to 3,570 vs. 2,475 for Russia.<sup>35</sup> Pranay Vaddi writes, “The US also could deploy more warheads on these [strategic] delivery systems – roughly 3,700 to Russia’s 2,800...”<sup>36</sup> In contrast, a National Institute for Public Policy study by Keith Payne and this author concluded that:

If not constrained by New START, with uploading, the [U.S.] Trident SLBM force reportedly could increase from ~960 to ~1,626 deployed warheads and the Minuteman ICBM force could increase from about 400 to ~1,000 deployed warheads, for a deployed strategic ballistic missile force of ~2,626 warheads. The number of warheads could be somewhat higher or lower than these estimates depending upon decisions related to necessary

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<sup>32</sup> Schneider and Payne, *Tailored Deterrence and Low-Cost Nuclear Weapons Upload*, op. cit., p. 37.

<sup>33</sup> *Ibid.*, p. x.

<sup>34</sup> Mark B. Schneider, “The Death of the New START Treaty,” *Information Series*, No. 560 (Fairfax, VA: National Institute Press, August 7, 2023), [https://nipp.org/information\\_series/mark-b-schneider-the-death-of-the-new-start-treaty-no-560-august-7-2023/](https://nipp.org/information_series/mark-b-schneider-the-death-of-the-new-start-treaty-no-560-august-7-2023/).

<sup>35</sup> Jessica Rogers, Matt Korda, and Hans M. Kristensen, “Nuclear Notebook: The long view – Strategic arms control after the New START Treaty,” *Bulletin of the Atomic Scientists*, November 9, 2022, <https://thebulletin.org/premium/2022-11/nuclear-notebook-the-longview-strategic-arms-control-after-the-new-start-treaty/>.

<sup>36</sup> Vaddi, “Beware Russia Bearing Arms Control Gifts,” op. cit.

missile range and the required number of single warhead missiles. Additionally, there will be several hundred bomber weapons which could be somewhat increased via uploading.<sup>37</sup>

In reality, even upload will not likely give the United States any advantage in deployed strategic warheads. Rather, more likely, it would only close the dangerous gap in Russia's favor that has been allowed to develop. The FAS estimate of Russia's warhead number is likely an undercount based upon the questionable assumption that the new Russian missiles are no more capable than the Soviet-era missiles they are replacing.<sup>38</sup> Russian strategic forces could be as much as 2,000 warheads higher than the FAS estimate.<sup>39</sup>

The cost of U.S. strategic force upload would be very low. An August 2020 report of the Congressional Budget Office concluded that the cost of uploading U.S. strategic forces to 3,500 nuclear warheads would be only \$100 million dollars.<sup>40</sup> Moreover, this would be spent over several years.

Because of the Covid epidemic followed by Russian refusal to allow treaty-required inspections, the United States had not conducted a New START Treaty inspection since March 2020 which means that Russia could already have covertly uploaded much of its strategic nuclear forces.<sup>41</sup> This is not hyperbole. Even with the entire New

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<sup>37</sup> Schneider and Payne, *Tailored Deterrence and Low-Cost Nuclear Weapons Upload*, op, cit., p. viii.

<sup>38</sup> Mark B. Schneider, *How Many Nuclear Weapons Does Russia Have? The Size and Characteristics of the Russian Nuclear Stockpile*, Occasional Paper, Vol. 3, No. 8 (Fairfax, VA: National Institute Press, August 2023), pp. xiii, 13, 57-70.

<sup>39</sup> *Ibid.*, p. 86.

<sup>40</sup> Congressional Budget Office, "The Potential Costs of Expanding U.S. Strategic Nuclear Forces If the New START Treaty Expires," August 2020, <https://www.cbo.gov/system/files/2020-08/56475-START.pdf>.

<sup>41</sup> Schneider and Payne, *Tailored Deterrence and Low-Cost Nuclear Weapons Upload*, op, cit., p. 6.

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START Treaty verification regime, verification was problematical. In 2010, then-Senator Christopher Bond noted the serious problems with the New START verification regime. He stated that, “The Select Committee on Intelligence has been looking at this issue closely over the past several months. As the vice chairman of this committee, I have reviewed the key intelligence on our ability to monitor this treaty and heard from our intelligence professionals. There is no doubt in my mind that the United States cannot reliably verify the treaty’s 1,550 limit on deployed warheads.”<sup>42</sup> The New START Treaty verification regime, such as it was, was highly dependent upon on-site inspections. Indeed, in 2020, former Under Secretary of State and chief New START Treaty negotiator Rose Gottemoeller said “...we discarded the counting rules in favor of confirming declared warheads on the front of missiles through reciprocal inspections; in fact, we did not need telemetry measures to confirm compliance with the warhead limits in the new treaty.”<sup>43</sup> This was a mistake.

As previously noted, in its last months in office, the Biden Administration recognized that, “Russia, the PRC and North Korea are all expanding and diversifying their nuclear arsenals at a breakneck pace – showing little or no interest in arms control.”<sup>44</sup> This is unlikely to change. The 2020 Trump Administration’s nuclear arms control negotiation with Russia was well conducted but Putin

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<sup>42</sup> Christopher Bond, “The New START Treaty,” *The Congressional Record*, November 18, 2010, <https://www.congress.gov/111/crec/2010/11/18/CREC-2010-11-18-pt1-PgS8093.pdf>.

<sup>43</sup> Rose Gottemoeller, “The New START Verification Regime: How Good Is It?,” *Bulletin of the Atomic Scientists*, May 21, 2020, <https://thebulletin.org/2020/05/the-new-startverification-regimehow-good-is-it/>.

<sup>44</sup> Pranay Vaddi, “Adapting the U.S. Approach to Arms Control and Nonproliferation to a New Era,” Arms Control Association, June 7, 2024, <https://www.armscontrol.org/2024AnnualMeeting/Pranay-Vaddiremarks>.

blocked any progress. He is likely to do the same in any new negotiation. It took almost a decade to negotiate the original START Treaty. President Obama did not sustain some of the most important previously-established verification provisions in the poorly conducted New START Treaty negotiation.<sup>45</sup> Putin could easily draw out any new strategic arms control negotiation *ad infinitum* by refusing to agree to reductions and serious verification provisions.

Thus, had the United States decided to extend the New START limits (by Executive fiat, without the advice and consent of the Senate) without any serious verification regime, the United States could have seriously degraded the U.S. deterrence position, thereby setting the stage for wars that could result from a simultaneous Chinese attack against Taiwan and a Russian attack against one or more NATO states.<sup>46</sup> This could be either coordinated or opportunistic.<sup>47</sup>

Today, there is an enormous disconnect between the increasing perceptions of the Russian and Chinese nuclear threats and the ideological devotion to illusory arms control. If Russia has covertly uploaded some or all its nuclear forces in violation of the New START Treaty, as is likely, when the crisis hits, the United States could easily face a combined Russia and Chinese nuclear threat at least two times larger than the combined United States, British and French nuclear deterrent. It might even be twice that. This could result in war and encourage nuclear escalation by Russia, China or both, with catastrophic consequences.

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<sup>45</sup> "Potemkin Village Verification," *op. cit.*

<sup>46</sup> As it is, NATO Secretary General Mark Rutte recently told NATO members, "we must be prepared for war." See, "NATO's Rutte warns allies they are Russia's next target," *Reuters*, December 11, 2025, <https://www.reuters.com/business/aerospace-defense/natos-rutte-warns-allies-they-are-russias-next-target-2025-12-11/>.

<sup>47</sup> Schneider and Payne, *Tailored Deterrence and Low-Cost Nuclear Weapons Upload*, *op. cit.*, p. vi.

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President Trump made the right decision when he rejected any extension of the fatally flawed and ill-conceived New START Treaty which was repeatedly violated by Russia and which has, since its inception, ill-served the national security interests of the United States and allies. As Secretary Rubio stated, "...arms control can no longer be a bilateral issue between the United States and Russia. As the President has made clear, other countries have a responsibility to help ensure strategic stability, none more so than China. Second, we will not accept terms that harm the United States or ignore noncompliance in the pursuit of a future agreement."<sup>48</sup> The Trump Administration advocates policies based upon "peace through strength," common sense, and policies that do not adversely affect U.S. interests. Extending the New START Treaty met none of these criteria.

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<sup>48</sup> Rubio, "The Next Era of Nuclear Arms Control," *op. cit.*



## *About the Author*

**Dr. Mark B. Schneider** is a Senior Analyst with the National Institute for Public Policy. He joined National Institute in September 2004 and specializes in missile defense policy, nuclear weapons, deterrence, strategic forces, and arms control issues.

Before his retirement from the Department of Defense, Dr. Schneider served in senior positions in the Office of the 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 as a member of the State Department Policy Planning Staff, the Professional Staff of the Senate Select Committee on Intelligence, the Department of Energy, the Energy Research and Development Administration and the Atomic Energy Commission. Prior to his government career, Dr. Schneider served as a policy analyst with the Stanford Research Institute and taught at the University of Southern California.

Dr. Schneider served as a member of the DoD Compliance Review Group. He chaired several working groups of the START and INF Treaty Implementation Commissions (JCIC and SVC) in Geneva, negotiating many implementation agreements with the successor states of the former Soviet Union. He most recently served as Acting Chairman of the U.S.-Russia Working Group on Missile Defense.

Dr. Schneider has been awarded two Presidential Rank Awards of Meritorious Executive in the Senior Executive Service, two Secretary of Defense Distinguished Civilian Service Medals and two Secretary of Defense Meritorious Civilian Service Medals.

Dr. Schneider earned his Ph.D. in history at the University of Southern California and Juris Doctorate from George Washington University. He was admitted to the Bar of Washington, D.C. in 1977 and Maryland in 1978. He is the author of many articles on arms control, nuclear deterrence, strategic forces and intelligence issues.



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