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

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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>

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.



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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 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.



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

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



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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 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 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





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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 additional missile.”<sup>25</sup> This may actually be an under-estimate.

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*, 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 been addressed in a Department of State noncompliance report.



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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 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.

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.



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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 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.

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 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



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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.

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.

<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>.





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<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.

<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.

<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.

<sup>11</sup> Henry Holloway, “Vladimir Putin is not afraid to use nukes & he could launch strike very soon, warns top British general,” *The Sun*, 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%20282%29.pdf>.

<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-folly-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-AAZ4ea1>.



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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).

<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/>,

<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).

<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-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>.



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<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/>.

<sup>35</sup> “FACTBOX – Strategic Missile Forces Day in Russia,” *Sputnik*, December 17, 2018, available at [https://dialog.proquest.com/professional/professionalnewsstand/docview/2157472585/fulltext/170A13075F1754EEB6/1?accountid=155509&site=professionalnewsstand&t:ac=170A13075F1754EEEB6/1&t:cp=maintain/resultcitationblocksbrief&t:zoneid=transactionalZone\\_1713baf472d](https://dialog.proquest.com/professional/professionalnewsstand/docview/2157472585/fulltext/170A13075F1754EEB6/1?accountid=155509&site=professionalnewsstand&t:ac=170A13075F1754EEEB6/1&t:cp=maintain/resultcitationblocksbrief&t:zoneid=transactionalZone_1713baf472d); Mark B. Schneider, “Russian Modernization of Its ICBM Force,” *Real Clear Defense*, April 23, 2020, available at [https://www.realcleardefense.com/articles/2020/04/23/russian\\_modernization\\_of\\_its\\_icbm\\_force\\_115224.html](https://www.realcleardefense.com/articles/2020/04/23/russian_modernization_of_its_icbm_force_115224.html).

<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.

<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/prsrl/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.

<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=transactionalZone\\_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=transactionalZone_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





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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>.

<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).

<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>.

<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/>.

<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>.

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