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# An Old and New START to Russian—United States Nuclear Arms Control Agreements

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An Old and New START to Russian—United States Nuclear Arms Control Agreements

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Spring 2016

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**Abstract**

The Russian Federation and the United States of America signed on April 8, 2010 the New START nuclear arms control treaty. The New START treaty replaced the lackluster SORT treaty in order to establish a nuclear agreement that would put new limits on numbers of weapons and delivery vehicles while also establishing an innovative framework for transparency and data transfer to allow confidence building between two countries that have not always seen eye-to-eye. Through academic analysis, treaty text, and four formal interviews, the context and trajectory of Russian-United States' arms control treaties has formed to portray New START as a continuation of the arms control tradition initially established by the Soviet Union and the U.S. Although there are substantial threats to the implementation and productivity of the newest nuclear arms control treaty, New START has sustained and proves to be a significant connection between Russia and the United States. The ulterior motives for each country to ratify and maintain New START counterbalance so as to result in strategic stability.

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## **Introduction**

### **I. The Problem, Research Question and Focus**

Nuclear issues have not disappeared with the disintegration of the Union of Soviet Socialist Republics, but have transformed to integrate new actors and new fears. The United States and the Russian Federation's New START (Strategic Arms Reduction Treaty) may seem like a rehash of U.S.-USSR nuclear arms control treaties, but new political considerations and goals underlie the New START. As the United States makes decisions based on the maintenance of their hegemony and the Russian Federation chooses courses of action based on a need to stay relevant; is the most current nuclear arms control treaty truly about reducing and setting limits on nuclear arsenals or about the individual states manipulating the situation to achieve political superiority? Each country tries to play the political game in order to gain the upper hand, but at the same time maintain strategic stability regarding nuclear capabilities. Now with the progression of the US's missile defense systems installed in NATO countries, strategic stability includes the calculation of non-strategic capability parity in addition to nuclear capability parity. Previous research has delved into the maintenance of strategic stability as a factor in the political maneuvering of each country in order to balance reductions in nuclear capability and their role in the international community. But the question remains if the New START treaty will achieve its purposes and goals or is the relationship between the United States of America and the Russian Federation too tenuous to maintain a bilateral treaty?

The development of the current nuclear arms control treaty between the United States of America and the Russian Federation comes after years of diplomatic and not-so diplomatic relations. Since the Russian Federation and the Soviet Union are inextricably connected due to the continuity of the political elite and the military complex. The Russian Federation was bequeathed one of the two largest nuclear arsenals in the world and due to the policies of the

USSR; the two superpowers aim to continue the trend of nuclear disarmament at an appropriate pace. The New START treaty was signed on April 8, 2010 in Prague<sup>1</sup> but with the agreement regarding warhead limits and delivery vehicles came the expectations and perceptions for behavior and compliance for both parties. Over the past decade economic and political factors have contributed to the changing and transforming of US-Russian relationships like the economic recession of 2008, Russia's current economic state, the expansion of NATO eastward, and external foreign policy issues embroiling the international community. Through navigating the nuclear disarmament of the U.S. and Russia's arsenals, both countries have created one productive link that can overcome external foreign policy issues and internal politics.

## **II. Literature Review**

Since nuclear arms control has been worked on from the 1960s through today, there has been a tremendous amount of analyses, especially regarding the United States and Russia. Articles like Shleifer and Treisman's "Why Moscow Says No: A Question of Russian Interests, Not Psychology," Butt and Postol's "Russian Concern over NATO Missile Defense," and Olga Oliker's "Unpacking Russia's New National Security Strategy" explain foreign policy in terms of the Russian perspective and how many of Russian policy decisions are a reaction to the actions of the United States in Europe and other matters that will directly affect Russia. Most articles that analyze the development of the New START treaty, the end results, and the ensuing protocol for the parties have a well-balanced view of the countries and political actors making decisions based on self-interest and survival in the international community. Two sources had a strong pro-United States bias and characterized Russian actions as aggressive and aiming to initiate conflict with the U.S. One source written by Professor Karako of Kenyon College, "Nuclear Weapons in the 112<sup>th</sup> Congress: Politics and

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<sup>1</sup> *New Strategic Arms Reduction Treaty (New START)* U.S. Department of State, Prague, 2010.

Policy after New START,” argues for increased military spending and corrections to the recklessness of the Obama’s administration regarding nuclear weapons. Professor Karako advocated the interference of domestic politics in foreign policy issues, which would disrupt the disarmament benefits to the international community along with the United States. Most sources advocated diplomacy and the continuation of nuclear disarmament as a means of achieving security and as a means to make a positive example for other disarmament endeavors. The sources that analyzed missile defense as a point of contention between the U.S. and Russia regarding the sustainability of the New START treaty delved into the inefficiency of the systems to do their supposed goals.

### **III. Research Methodology**

Throughout the acquisition of research multiple types of sources were utilized to gain a comprehensive picture of the New START treaty. Through four formal interviews and qualitative data, many different perspectives and information were gathered. The qualitative data takes the form of treaty text, published remarks of experts and government officials, and scientific and academic analysis on New START, foreign policy perspectives, transparency protocols, and disarmament concept analysis.

Regarding the formal interviews, two experts were from the United Nations Institute for Disarmament Research but as they came from different areas of interest, the views did not overlap, which provided different sets of information. Dr. Pavel Podvig is the program lead for Weapons of Mass Destruction, but he has published extensively on New START and the context of strategic stability and Russia. Mr. Tim Caughley is the Resident Senior Fellow at UNIDIR and he specializes in the humanitarian impact of nuclear weapons. The Senior Program Advisor for the Emerging Security Challenges Program at the Geneva Center for Security Policy—Dr. Marc Finaud—was the third formal interviewee. The final interview was with Dr. Heather Williams, a Research Associate at the Centre for Science and Security

Studies at King's College London. Dr. Williams fortuitously visited Geneva during the ISP period, thus allowing a face-to-face interview. Dr. Williams' had done her doctoral thesis on trust and verification within the context of U.S.-Russian arms control treaties. Three of the formal interviews were achieved through emailing contacts made through lecturers of the School for International Training; even though, only one of the interviewees was a guest lecturer for the School. The fourth interview was organized after emailing many different disarmament organizations and in particular those that had expertise on U.S.-Russian relations.

All interviews were conducted with the consent and knowledge of the interviewee about the purpose of each interview. At the commencement of each interview, the reasons for the interview were explained and then consent was attained from each interviewee that their responses may be used and that they would be comfortable as known sources in this research paper.

#### **IV. Definitions and Analytical Framework**

The most important concept to be used throughout this paper—which will be addressed in its own separate section later—is “strategic stability”. Strategic stability is intrinsically connected to the policy of deterrence within the context of Russian and the U.S.’s arms control treaties. Strategic stability is used in nuclear disarmament to mean broadly: the balance of the capabilities of military forces and as a status of relationships that guaranteed that neither side could gain a decisive advantage over its adversary in the long term.<sup>2</sup> Deterrence will be used to mean that the possession of nuclear weapons by two powers reduces the likelihood of war precisely because it makes the costs of war so great.<sup>3</sup>

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<sup>2</sup> Pavel Podvig, “Russia, Strategic Stability, and Nuclear Weapons,” in *The War that Must Never Be Fought: Dilemmas of Nuclear Deterrence* ed. George P. Shultz and James E. Goodby. Hoover Press: 2015. 2.

<sup>3</sup> Scott D. Sagan, “The Perils of Proliferation: Organization Theory, Deterrence Theory, and the Spread of Nuclear Weapons,” *International Security* 18, no. 4 (1994): 67.

## Analysis

### **I. Historical Context of Nuclear Arms Control Agreements**

The United States remains the consistent thread in the series of nuclear arms control agreements between the government that has control of the territory of Russia. Beginning with the nuclear arms race during the Cold War, the United States and the USSR conducted three major negotiations in order to limit the extent of proliferation. Begun in November 1969, the first of the nuclear arms control negotiations, Strategic Arms Limitation Talks (SALT I)<sup>4</sup>, produced two successful agreements: the 1972 Anti-Ballistic Missile (ABM) Treaty and the Interim Agreement. The terms of the Interim Agreement resulted in the United States having more limits on Intercontinental ballistic missiles (ICBMs) silos and Submarine-launched ballistic missile (SLBM) launch tubes than the Soviet Union.<sup>5</sup> Although the Interim Agreement limited the ICBM and SLBM forces, the agreement failed to address strategic bombers and number of warheads.

A few months after the ABM treaty went into force, the Soviet Union and the United States commenced negotiations to pursue another arms control agreement. SALT II was signed on June 1979 in order to limit ICBMs, SLBMs, and strategic bomber-based nuclear to 2,250 delivery vehicles for both countries.<sup>6</sup> The treaty was advantageous for the United States as they had less than the benchmark number for delivery vehicles and would have found it possible to increase their numbers of delivery vehicles. On the other hand, the Soviet Union would have needed to decrease their numbers by about 270 delivery vehicles.<sup>7</sup> SALT II may have been signed in June of 1979, but after the Soviet Union invaded Afghanistan six

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<sup>4</sup> "U.S.-Russian Nuclear Arms Control Agreements at a Glance," *Arms Control Association*, last modified April 1, 2014, <https://www.armscontrol.org/factsheets/USRussiaNuclearAgreementsMarch2010>.

<sup>5</sup> Ibid.

<sup>6</sup> Ibid.

<sup>7</sup> Ibid.

months later U.S. President Jimmy Carter asked the Senate not to consider SALT II and prevent ratification.<sup>8</sup>

The last nuclear arms control agreement for the Soviet Union was the Strategic Arms Reduction Treaty (START I), which U.S. President Ronald Reagan proposed in the early 1980s in order to reduce their nuclear arsenals to 1,600 delivery vehicles. This agreement, unlike SALT II, limited number of warheads and required the destruction of excess vehicles guaranteed by an intrusive verification protocol.<sup>9</sup> START I did not enter into force until July 1991 because of the collapse of the Soviet Union and the need to make sure that former Soviet bloc countries were completely denuclearized. The reductions required from START I were completed in December 2001, while the treaty expired in 2009.<sup>10</sup> Although START I did not enter into force nor expired during the Soviet Union, it originated from the political will of the Soviet Union to negotiate arms limits that allowed for such an agreement to be accepted and then ratified by both parties.

As the first nuclear arms control agreement negotiated by the new Russian Federation, START II was signed in January 1993. START II was an additional accord to START I with the aims of reducing deployed warheads to around 3,000-5,000 and banning the utilization of destabilizing multiple-warhead land-based missiles.<sup>11</sup> START II did not enter into force because the State Duma—Russia's lower house in Parliament—made the ratification of a 1997 protocol a requirement for entry into force. Since the U.S. Senate did not ratify the 1997 protocol along with several ABM Treaty amendments, the Russian Federation's first nuclear agreement was not successfully implemented. The result of the U.S. Senate not ratifying the 1997 protocol was not only the failure of START II, but also that the

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<sup>8</sup> Ibid.

<sup>9</sup> Ibid.

<sup>10</sup> Ibid.

<sup>11</sup> Ibid.

START III Framework failed to enter into negotiations, which were to begin after START II entered into force.

U.S. President George W. Bush and Russian President Vladimir Putin spearheaded the Strategic Offensive Reductions Treaty (SORT) in order to reduce deployed nuclear warheads to 1,700-2,000. Signed on May 24, 2002 and entered into force on June 1, 2003,<sup>12</sup> SORT was a weak agreement since the two sides could not agree upon a common approach to account for warheads<sup>13</sup> with little to no verification measures that resulted in a lack of confidence between Russia and the United States. New START superseded SORT on February 5, 2011.<sup>14</sup>

Throughout the time of nuclear arms control treaties political will from both sides of the bilateral agreement was necessary in order to ensure successful entry into force and a strong verification system. As can be seen with SALT II, START II, and SORT the United States government was responsible for the failure of an effective bilateral agreement. SALT II was a promising nuclear arms control treaty but it did not enter into force as a reaction to the Soviet Union's foreign policy decision to invade Afghanistan. START II failed to enter into force due to domestic politics that affected nuclear arms agreements with Russia for almost a decade. Finally, SORT did enter into force, but was only a façade of an arms control agreement because of an absence of common terminology, approach to verification, and reduction protocols (as in how would each country eliminate certain weapons and what would be counted as deployed warheads). In fact, the Bush administration "was not interested in arms control and derided detailed negotiations that produced voluminous treaty documents as a waste of time,"<sup>15</sup> leading to an agreement that was supposed to limit deployed warheads to 1,700-2,000 per country, but neither country was held accountable for such reductions. In

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<sup>12</sup> "U.S.-Russian Arms Control Agreements," *Arms Control Association*.

<sup>13</sup> Patton, "A New START Model for Transparency," 9.

<sup>14</sup> "U.S.-Russian Arms Control Agreements," *Arms Control Association*.

<sup>15</sup> Subrata Ghoshroy, "The New START Treaty: A Real Step Towards Disarmament or a Dead End?" *Economic and Political Weekly* 45, no. 18 (2010): 18.

comparison to SORT, New START requires detailed definitions, comprehensive protocols for regular data exchange, notifications, and inspections.<sup>16</sup> Although there have been a few failed attempts at nuclear arms control between the two largest nuclear arsenals, the newest agreement has positive and durable requirements that will provide a working framework for future bilateral negotiations. For future arms control agreements, Russia and the United States are abiding by the limits set up in New START, and “the American position is very simple: read all the statements after New START and are ready to negotiate further reductions and even develop some figures—one third of post-2018 figures.”<sup>17</sup> With one side of a bilateral relationship ready to continue with nuclear reductions after the conclusion of New START and having a framework developed, another comprehensive and working nuclear arms control treaty is not an unreasonable trajectory.

## II. New START

The most recent bilateral arms control agreement between the United States and the Russian Federation—New START—has no accusations of violation or non-compliance. The treaty succeeded SORT, before SORT even expired. Signed on April 8, 2010 by U.S. President Barack Obama and Russian President Dmitry Medvedev, the New Strategic Arms Reduction Treaty was an agreement that detailed “measures for the further reduction and limitation of strategic offensive arms.”<sup>18</sup> The treaty entered into force in 2011 and in accordance with the treaty, the aggregate numbers of specified components of each nuclear arsenal must be met within seven years after the entry into force, meaning that by 2018 Russia and the U.S. must verify that they are at or under the agreed-upon limits.

In order to understand the context of the treaty, it is also important to know the details of what the treaty expects each party to do over the course of the ten-year agreement.

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<sup>16</sup> Patton, “A New START Model for Transparency,” 9.

<sup>17</sup> Marc Finaud, interview by Samantha Pitz, 12/04/16.

<sup>18</sup> *New Strategic Arms Reduction Treaty (New START)* U.S. Department of State, Prague, 2010: 1.

According to New START's treaty text, by 2018 the parties must have their counted nuclear arms to be in accordance with Article III, which must not exceed:

*700 for deployed Intercontinental Ballistic Missiles (ICBMs), deployed Submarine-launched Ballistic Missiles (SLBMs), and deployed heavy bombers; 1,500 for warheads on deployed ICBMs, warheads on deployed SLBMs, and nuclear warheads counted for deployed heavy bombers; 800 for deployed and non-deployed ICBM launchers, deployed and non-deployed SLBM launchers, and deployed and non-deployed heavy bombers.*<sup>19</sup>

By giving base numbers for a series of possibilities—for example 700 for ICBMs, SLBMs and heavy bombers—the treaty allows for Russia and the U.S. to determine the composition of their strategic offensive forces. Due to the flexibility of the composition of each nuclear arsenal, the countries can make appropriate cuts but still feel confident that their nuclear arsenals contain the strongest weapons to maintain nuclear deterrence. To demonstrate the progress that New START exemplifies, the reduction number for START I (2001) regarding deployed warheads was 6,000 and by 2018 it will be 1,550 warheads. In SALT II (1979) the deployed delivery vehicle limit was 2,250 and for New START the deployed delivery vehicle limit will be 700.<sup>20</sup> New START has made significant reductions when looking at the long-term denuclearization of the world's largest nuclear arsenals, but the countries have been retiring old and unreliable arms as part of recent modernization processes. Although New START does not require significant cuts into their strategic offensive arms, the treaty includes provisions that make most of the reductions of the nuclear forces irreversible.<sup>21</sup> Previous treaties, like SORT, did not provide specific provisions that required strict elimination of nuclear arms and eradicated the possibility of only putting nuclear forces into storage. In Prague, at the end of the nuclear arms control negotiations, Moscow and Washington did not only sign the treaty but also the Protocol to New START, which provided the guidelines for notifications, inspections, and verification processes required. For

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<sup>19</sup> *New START*, 3.

<sup>20</sup> "U.S.-Russian Arms Control Agreements," *Arms Control Association*.

<sup>21</sup> Patton, "A New START Model for Transparency," 10.

notifications alone, the protocol gives detailed and specific practices<sup>22</sup> for the countries to abide by, sometimes down to the hour, to ensure security and confidence with each other.

Why did the Russian Federation and the United States of America decide that another nuclear arms treaty was necessary before SORT expired? The general purpose for pursuing arms control is three-fold: transparency, predictability, and reciprocity.<sup>23</sup> SORT failed on all three general purposes of arms control as it lacked verification processes that would hold both countries accountable to the other. Russia and the U.S. would want to continue all three components as a way to keep each other responsible, but also a great deal of trust since arms control is showing the other side very private parts of the government. Nuclear arsenals are extremely classified and the fact that Russia and the U.S. are still abiding by New START demonstrates the strength of the purposes of arms control. The purpose of the treaty text and the purpose of why Russia and the United States ratified New START are varying.

The purpose of the treaty is to continue the work of previous arms control agreements to lessen the danger posed by large nuclear arsenals, especially in current times with omnipresent non-state actors and terrorists. President Obama remarked, “the New START treaty responsibly reduces the number of nuclear weapons and launchers that the United States and Russia deploy, while fully maintaining America’s nuclear deterrent.”<sup>24</sup> The immediate official perspectives of the United States and Russia were ones of positivity due to cooperation and consensus. After the signing of the New START treaty in Prague, President Medvedev complimented how “this agreement enhances strategic stability and, at the same time, enables us to rise to a higher level for cooperation between Russia and the United States.”<sup>25</sup> But even though the leaders of the two countries involved in New START have

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<sup>22</sup> *Protocol to New START (provisions)* U.S. Department of State, Prague, 2010: 100.

<sup>23</sup> Heather Williams, interview by Samantha Pitz, 27/04/16.

<sup>24</sup> Barack Obama’s Remarks at a Meeting on the New START Treaty at the White House, District of Columbia, United States of America, November 18, 2010.

<sup>25</sup> Dmitry Medvedev’s Remarks at New START Treaty Signing Ceremony and Press Conference at the Prague Castle, Prague, Czech Republic, April 8, 2010.

promoted the benefits to nuclear security and stability through this bilateral agreement, the official party line does not exactly encompass the behind-the-scenes motives of either country.

For the Russian Federation, the commencement of new nuclear arms control negotiations was not necessarily only from the purpose of enabling the country to have greater cooperation with the United States or enhancing strategic stability. Recently, Russia has needed to maintain its position as a global leader. Through political actions that seem aggressive—like the invasion of Ukraine—or through agreements that involve economic benefits for Russia, the country has been trying to re-establish its place in the international community. By having an arms control agreement with the United States, Russia can maintain a “certain status in this business,”<sup>26</sup> which prevents Russia from losing its position as a country that has a say. National ownership of nuclear weapons offers perceived international status and insurance against aggression<sup>27</sup>, which would only multiply for Russia since not only does it own one of the biggest nuclear arsenals, but also the country is a frontrunner in nuclear disarmament. Russia has a permanent seat on the United Nations Security Council, along with belonging to BRICS, but risks relevance as energy security destabilizes in Europe. There had been some negotiating before signing of New START because Russia was concerned with the U.S.’s plans for a missile defense system in Europe, but once the United States proved obstinate on the matter Russia conceded, because if not, the U.S. would walk away and make Russia look inferior. Because of a legally binding treaty between the two, Russia is an equal partner.<sup>28</sup> The substance of the treaty was not the most important aspect of the treaty since Russia aimed for a binding legal document with the United States. Russia’s nuclear arsenal has many aged weapons that the government was

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<sup>26</sup> Pavel Podvig, interview by Samantha Pitz, 18/04/16.

<sup>27</sup> Owen B. Toon et al. “Consequences of Regional-Scale Nuclear Conflicts” in *Science* 315, no. 5816 (2007): 1224.

<sup>28</sup> Podvig, interview by Samantha Pitz.

already planning on dismantling. In fact, the New START treaty “mostly ratified cuts in the Russian nuclear arsenal that were occurring anyway.”<sup>29</sup> Russia made the decision to go through with New START without any substantive reasoning regarding nuclear disarmament, but for the purpose of maintaining the external perspective that Russia is an important international figure and therefore should be respected and considered.

The United States of America has several purposes for ratifying the New START treaty that span from wanting to deter Russian power to appeasing domestic concerns. For the U.S. there had been concerns in the years leading up to the New START treaty of Russia’s overbearing position in Eastern Europe that came to a climax with the Russian-Georgian conflict in 2008 and 2009. By preserving the arms control tradition with Russia, the United States is able to constrain developments in Russia<sup>30</sup> through pressure exerted through the legally binding treaty and the U.S.’s position as the world’s superpower. Pursuing an arms control tradition not only helps to deter Russian power—by reducing size of their nuclear arsenal—but also appeases domestic concerns that the United States is not doing enough as a global military superpower to commit to nuclear security. In November of 2010, the Obama Administration released a commitment called the “1251 report”, which came out in conjunction with the FY2012 nuclear forces budget request to Congress to describe problems and to renew commitment for nuclear weapons: “given the extremely tight budget environment facing the federal government, these requests to the Congress demonstrate the priority the Administration places on maintaining the safety, security, and effectiveness of the deterrent.”<sup>31</sup> The United States is obligated to balance domestic concerns and international issues, so while increasing the federal budget for the nuclear weapons programs may seem at odds with the continuation of arms control with the Russian Federation, in fact, those

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<sup>29</sup> Andrei Shleifer and Daniel Treisman, “Why Moscow Says No: A Question of Russian Interests, Not Psychology,” *Foreign Affairs* 90, no. 1 (2011): 135.

<sup>30</sup> Podvig, interview by Samantha Pitz

<sup>31</sup> Thomas Karako, “Nuclear Weapons in the 112<sup>th</sup> Congress: Politics and Policy after New START Treaty.” *PS: Political Science and Politics* 45, no. 2 (2012): 347.

decisions are rational. There is a direct relationship between the United States domestic politics and external policy, because for treaties the President may still be available to negotiate and create an agreement, but then Congress has the power to ratify and accept the treaty. Due to the balance of powers, the United States has the benefits of transparency with its citizens, but can still be subject to domestic concerns.<sup>32</sup> The purpose of a nuclear arms control treaty is to maintain deterrence, but at the same time the United States can improve and modernize their current arsenals to strengthen their perceived deterrence capabilities.

The New START treaty could be perceived as an empty agreement, negotiated for the purposes of continuing a decades-long tradition in order to monitor the country which poses the greatest political threat to the other. On the other hand, New START has provisions and attributes that strengthen the process of arms control treaties and ensure that the treaty is a useful and productive process for global nuclear security. The roles of transparency and predictability within New START are the strongest attributes to allow for a sustainable treaty. The protocol of New START contains 165 pages<sup>33</sup> detailing the definitions, circumstances, process, and procedure of how to maintain transparency and predictability. Russia and the United States have pioneered strong transparency mechanisms for nuclear arms control treaties starting with the SALT I agreement and have now set a new standard for transparency with New START. New START introduced provisions that require disclosure of the actual number of warheads deployed on strategic delivery systems, so now “the data released by the parties more accurately reflects the operational status of the nuclear forces and progress towards the reduction of nuclear arsenals.”<sup>34</sup> Transparency for New START does not just include data exchange, but within the terms of agreement, both countries have the right to conduct up to 18 annual inspections at ICBM, submarine, and air bases and

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<sup>32</sup> Finaud, interview by Samantha Pitz

<sup>33</sup> *Protocol to New START (provisions)* U.S. Department of State: 1-165.

<sup>34</sup> Patton, “A New START Model for Transparency,” 9.

formerly declared facilities<sup>35</sup> in order to confirm the accuracy of declared data. According to Dr. Heather Williams, the predictability of New START is the strongest part since there has been a “breakdown in relations between the two in the past two, two and a half years, but nonetheless New START is still working.”<sup>36</sup> The data exchange between Russia and the U.S. occurs every six months, with the most recent exchange completed in September 2015 demonstrating how both countries are on track to adhere to the reduction numbers set forth for completion in 2018.<sup>37</sup> Trust for another actor in global politics is not easily found, but by continuously completing set deadlines to create a predictable exchange of data then trust can develop. Russia and the United States have pursued a tradition that requires predictability even in the face of foreign policy issues that do not involve nuclear weapons. Based on Russia-U.S. nuclear arms control treaty track record, the New START treaty is progressing successfully due to its pioneering transparency provisions and the predictability of behavior.

As with any agreement, weaknesses surface after the negotiations have concluded, which does not exclude the New START treaty. Even though New START has provided extensive definitions of what New START keeps track of and aims to eliminate, the specificity leads to loopholes for Russia and the U.S. to use to circumvent the purpose of the treaty. Regarding strategic offensive nuclear arms, New START focused on warheads and delivery vehicles but did not address issues of the amount of “overkill” in either country’s arsenal, nor the launch-ready alert postures<sup>38</sup> of hundreds of nuclear missiles for each country. What a launch-ready alert posture, or also known as hair-trigger alert, means is the two countries’ command, control, and communication systems for hundreds of missiles will be poised to launch at seconds notice and execute firing missiles before the quickest counter-attack could be initiated. By maintaining hair-trigger alert on hundreds of nuclear weapons

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<sup>35</sup> *New START*, 14.

<sup>36</sup> Williams, interview by Samantha Pitz.

<sup>37</sup> Thielmann, Greg. “Latest New START Data Shows Nuclear Posture—and Nuclear Posturing.” *Arms Control Association*. Last modified October 13, 2015. Web.

<sup>38</sup> Bruce Blair et al., “Smaller and Safer: A New Plan for Nuclear Postures,” *Foreign Affairs* 89, no. 5 (2010): 9.

and those weapons constantly changing combat positions or moving to and from maintenance facilities allows non-state actors or terrorists to hack into the control center or steal the missiles as they are being transported.<sup>39</sup> The true weakness of the New START treaty is not from circumvention or nuclear parity but from the reckless ignorance of the current state of foreign affairs. Terrorism has changed context to become individualistic and technologically based. The negotiators not expanding their scope of what could be a threat to nuclear security to include the possibility of non-state actors—uninvolved in Russia-U.S. relations—is a tremendous risk to the safety and security of the world.

The definitions provided in the New START treaty text created loopholes for the types of weapons that are currently in the United States' and Russia's arsenals that could endanger security. The United States maintains the capability to transfer about 2,800 warheads that are currently kept in active reserve<sup>40</sup> to become deployed, while Russia has cruise missiles that fall outside the scope of the New START limits and reporting requirements<sup>41</sup> in addition to 5,500 warheads that are in storage.<sup>42</sup> The United States and Russia, since the entry into force of New START, have been looking to new ways to modernize their current weapons or adapt them to maintain parity with the other country, while at the same time trying to gain an upper hand. Although both countries are angling to find an advantage that is not covered by New START, in the end, the loopholes that Russia and the U.S. find result in parity. By each side having warheads and other nuclear forces in reserve—therefore remaining outside the scope of the treaty—and tactical and defensive weapons, the dangers posed to each other result in a counter-balance. The weaknesses of the treaty may create a space for circumvention, but since both countries participate in such actions the result is parity outside the treaty.

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<sup>39</sup> Blair, "Smaller and Safer," 13.

<sup>40</sup> Patton, "A New START Model for Transparency," 26.

<sup>41</sup> Ibid, 22.

<sup>42</sup> Ghoshroy, "A Real Step Towards Disarmament or a Dead End?" 18.

### III. Strategic Stability

In arms control, a concept that is the aim for the end result is strategic stability. The term strategic stability originated during the Cold War as the Soviet Union considered that concept the most critical outcome for the nuclear arms control talks. The Soviet Union defined strategic stability as a “balance of the capabilities of military forces and as a status of relationships that guaranteed that neither side could gain a decisive advantage over its adversary in the long term.”<sup>43</sup> The paradox of strategic stability is how the danger of instability at high levels of conflict promotes stability of low levels of conflict.<sup>44</sup> The U.S. and the USSR did not engage in active war during the Cold War period because of strategic stability—there was a low risk of going to war due to deterrence. But after the collapse of the Soviet Union, the Russian Federation still uses the concept of strategic stability to argue for certain provisions and limitations for the United States regarding arms control even when the concept has lost its potency. Strategic stability is becoming an outdated term when only in the context of nuclear weapons and can now be defined any way an actor chooses which leads to the usage of the term as a smokescreen for other motivations.<sup>45</sup> Since the 1990s many changes have occurred on the global stage apart from the conception of the Russian Federation. With the advent of the Internet, technological advances have occurred at an exponential rate resulting in a new forum and forms of violence. Strategic stability can still be applicable for the realm of arms control, but the term needs a redefinition and a broader understanding. A redefinition of strategic stability needs to include how the spectrum of violence is ever increasing with cyber warfare and new weaponry.<sup>46</sup> On Russia’s side, they are developing new dangerous tactical weapons, one of which is a single large missile with

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<sup>43</sup> Pavel Podvig, “Russia, Strategic Stability, and Nuclear Weapons,” in *The War that Must Never Be Fought: Dilemmas of Nuclear Deterrence* ed. George P. Shultz and James E. Goodby. Hoover Press: 2015. 2.

<sup>44</sup> Robert Axelrod, “The Concept of Stability in the Context of Conventional War in Europe,” *Journal of Peace Research* 27 no. 3 (1990): 247.

<sup>45</sup> Podvig, interview by Samantha Pitz.

<sup>46</sup> Williams, interview by Samantha Pitz.

many miniaturized warheads and on the United States' side, are developing a hypersonic weapon—also known as Prompt Global Strike program—that would have its own dangers.<sup>47</sup> The scope of strategic stability should not only apply to how nuclear deterrence provides low risk to active war, but should encompass conventional and technological threats. At the end of the Soviet Union, there was increased attention to the importance and potential of conventional arms control for promoting stability.<sup>48</sup> Now with two decades passed, it is time to broaden the context strategic stability for arms control and deterrence.

#### IV. Threats to Sustainability

The fact that the New START treaty has endured for the past five years through heightened tensions between the United States and Russia shows the resiliency of the treaty, but risks have developed that could upset the continuance of New START. In particular, the most potent threats stem from the inability of New START to address defensive arms systems. The United States has been developing a missile defense system with NATO countries in Europe, a program called the European Phased Adaptive Approach (EPAA) that Russia wants removed or at the very least addressed. The Preamble to the New START treaty has a paragraph that is the point of contention<sup>49</sup> and differing interpretations from both sides. The paragraph reads:

*Recognizing the existence of the interrelationship between strategic offensive arms and strategic defensive arms, that this interrelationship will become more important as strategic nuclear arms are reduced, and that current strategic defensive arms do not undermine the viability and effectiveness of the strategic offensive arms of the Parties<sup>50</sup>*

The Russian Federation takes this paragraph to mean that any missile defense system of the United States' that is based in Europe would threaten the retaliatory capabilities of Russia's offensive weapons and violate of New START. The current missile defense system stems

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<sup>47</sup> William J. Broad and David E. Sanger, "Race for Latest Class of Nuclear Arms Threatens to Revive Cold War," *The New York Times* April 16, 2016.

<sup>48</sup> Axelrod, "The Concept of Stability," 247.

<sup>49</sup> Williams, interview by Samantha Pitz.

<sup>50</sup> *New START*, 2.

from the National Missile Defense Act signed by U.S. President Bill Clinton with the purpose of defending “the territory of the US against limited ballistic missile attack (whether accidental, unauthorized or deliberate).”<sup>51</sup> By taking the broader definition of strategic stability to include offensive and defensive weapons, then it is rational for Russia to be concerned that their retaliatory capabilities would be limited with missile defense systems in Poland the Czech Republic, especially with the reductions of their nuclear arsenal.<sup>52</sup> A different U.S. President runs the newest development of missile defense, but similar political tensions still exist when balancing national interest and strategic stability.

The United States’ missile defense system that Russia is concerned with is the EPAA that has four phases to incorporate anti-ballistic missiles throughout Europe. Phase one was that by 2011, the US would have deployed Ballistic Missile Defense (BMD)-equipped Aegis ships in the Mediterranean to protect portions of southern Europe from Iranian missiles. Phase two was that by 2015, the US would have constructed a land-based interceptor site in Romania, upgrade sea- and land-based interceptors and strengthen sensor networks. Phase three takes place at the end of 2018, with the U.S. constructing a second site in Poland. Finally, phase four is that within the 2020 time frame have upgraded interceptors available to counter ICBM threats.<sup>53</sup> By phase four the United States will have developed a missile defense system that could put Russia’s nuclear capabilities at risk. The specific missiles that would be used by the U.S. are the SM-3 Block IIA and Block IIB interceptors that could engage Russian ICBM warheads, either in combination with, or independent of, the strategic Ground-Based Midcourse system now deployed in Alaska and California.<sup>54</sup> The stability of deterrence, which is necessary in the realm of nuclear weapons, comes down to an

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<sup>51</sup> Andrew M. Sessler et al. *Countermeasures: A Technical Evaluation of the Operational Effectiveness of the Planned US National Missile Defense System*, Union of Concerned Scientists: MIT Security Studies Program, 2000: 107.

<sup>52</sup> Ibid.

<sup>53</sup> Ghoshroy, “A Real Step Towards Disarmament or a Dead End?” 19.

<sup>54</sup> Yousaf Butt and Theodore Postol, *Upsetting the Reset: The Technical Basis of Russian Concern Over NATO Missile Defense*. Federation of American Scientists, 2011: 2.

assessment of the viability of both sides' retaliatory capacities.<sup>55</sup> For Russian analysts, the risk of U.S. BMD systems proximal to Russian borders risks the deterrence that has been cultivated for decades.

In attempts to reduce the perceived threat of NATO BMD systems, Russia looks for cooperation with the United States and NATO countries to produce a legally binding document promising that the BMD systems are not to be used against or aimed at Russia. The Russian Federation views cooperation on BMD systems as one of the ways to protect its interests by having a combination of politically and legally binding obligations, transparency, confidence-building measures, and cooperation.<sup>56</sup> NATO had previously invited Russia to join the BMD program for the purpose of exchanging information, which Russia would prefer to develop a joint European missile defense network alongside NATO to ensure that the EPAA will not threaten Russia's national security. But NATO, in contrast, wanted to create two separate systems for the exchange of information.<sup>57</sup> By separating Russia from the exchange of data among those countries involved in the BMD systems, transparency and then confidence and trust dissipate on the Russian side. A Russian foreign minister Lavrov has said, "Russia's agreement to discuss cooperation on missile defense in the NATO-Russia Council does not mean that Moscow agrees to the NATO projects which are being developed without Russia's participation."<sup>58</sup> Since NATO refuses to create channels that would promote transparency and confidence building, Russia feels it necessary for a legally binding agreement that the EPAA is not focused on Russia in any way.<sup>59</sup> In response to Russia's desire for a legally bound promise, Frank Rose, the U.S. Assistant Secretary at the Bureau of Arms Control remarked that the U.S. missile defense is neither designed nor directed against Russia's strategic nuclear deterrent, but "we have also made it clear that we cannot and will

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<sup>55</sup> Blair, "Smaller and Safer," 10.

<sup>56</sup> Podvig, "Russia, Strategic Stability, and Nuclear Weapons," 10.

<sup>57</sup> Butt, *Upsetting the Reset*, 5.

<sup>58</sup> *Ibid*, 30.

<sup>59</sup> Williams, interview by Samantha Pitz.

not accept legally-binding or other constraints that would hinder our ability to defend the United States, our allies, and our partners.”<sup>60</sup> The irresponsible choice to freeze Russia out of the information loop and to discount a legal remedy for confidence building measures regarding missiles in Europe will increase tensions between Russia and the U.S. and NATO-at-large.

Russia’s position on the U.S. and NATO’s BMD systems is not only based on threatened capability, but also based on political reasons. According to Dr. Podvig of UNIDIR, “Russia knows that current BMD systems won’t affect them at this time, but they don’t know the long-term.”<sup>61</sup> In addition to the uncertainty of future developments regarding BMD systems, Russia’s position can serve a pragmatic political purpose domestically as governmental officials can paint a picture of Russia under siege, which “helps deflect challenges to the legitimacy of the Russian political system.”<sup>62</sup> The focus on an encroaching NATO missile system can distract the domestic audience from failures of the government, whether it’s the election of certain government officials or political actions like the invasion of Ukraine. Russian officials have made a big deal about the United States withdrawing from the Anti-Ballistic Missile (ABM) Treaty in 2002 since that decision allowed for the U.S. to establish the BMD systems with the collaboration of NATO in Europe. The U.S. action of withdrawing from the ABM treaty may have risked the existence of New START, but the commencement of the talks and its ratification demonstrate that the objections were mostly governmental rhetoric for domestic reasons and does not mirror the actual diplomatic relationship between the U.S. and Russia.<sup>63</sup> The technical aspects of the EPAA plans of the U.S. may pose threats to the retaliatory capabilities of Russia, but if Russia felt strongly that the survival of deterrence and strategic stability depended on the U.S. to retract EPAA then

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<sup>60</sup> Frank A. Rose remarks at Royal United Services Institute Missile Defense Conference, London, United Kingdom, April 12, 2016.

<sup>61</sup> Podvig, interview by Samantha Pitz.

<sup>62</sup> Pavel Podvig, “Point of Distraction,” *The Bulletin Online*, Bulletin of the Atomic Scientists. 1 June 2012.

<sup>63</sup> Tim Caughley, interview by Samantha Pitz, 14/04/16.

New START would not have happened. NATO's BMD system is a cause for concern, but not enough to risk the sustainability of New START.

#### **V. Future of Russia—U.S. Arms Control**

The New START treaty is two years away from the final reduction numbers and five years away from the end of the verification period. After years of tensions between the United States and Russia, nothing has affected the verification and implementation procedures for either side. The process of bilateral arms control treaties has proven to be sustainable and transcends ephemeral disagreements. If violations on other agreements or the behaviors of either state was truly detrimental, then New START would not still be implemented and the international community will most likely see the completion of the expectations and protocols.

For future nuclear arms control treaties, many scholars agree that the most probable scenario will be the option of a five-year extension on the New START treaty after 2021. In Article XIV, the treaty specify that “if the Parties decide to extend this Treaty, it will be extended for a period of nor more than five years unless it is superseded earlier by a subsequent agreement on the reduction and limitation of strategic offensive arms.”<sup>64</sup> But after the five year extension of New START would occur—that would include new reduction numbers for the nuclear forces already covered in New START—the two countries would need to address some issues with their own relationship for the successful ratification of a subsequent treaty. Creating a new arms control treaty would be very difficult and would require broadening the scope past strategic offensive arms<sup>65</sup> or else neither side would be interested. Before the next treaty, each side will need to see changes or the acknowledgment of issues that have continued tensions.

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<sup>64</sup> *New START*, 16.

<sup>65</sup> Podvig, interview by Samantha Pitz.

On the Russian side, the United States needs to address their BMD systems in Europe and the U.S.'s Prompt Global Strike—a program that is a cause for concern even within the U.S. as the missile when launched is ambiguous for other countries to identify as non-nuclear.<sup>66</sup> The main overarching concern for Russia is that to provide effective deterrence then they would like to see legally binding agreements, but until then they judge everything in terms of dangers and threats. In Russian military jargon a danger means a concern, while a threat could spark conflict. In 2015's Russian military doctrine, it termed "U.S. and NATO activities as dangers, although a number of specific capabilities (e.g., Global Strike) were classed as threats."<sup>67</sup> Although some of Russian concerns will never really be addressed nor are as important as governmental rhetoric makes issues seem, the United States will need to produce other confidence building measures.

For the United States, they believe in a "step by step"<sup>68</sup> policy for strengthening disarmament procedures through many small bilateral or plurilateral agreements. The legally binding agreements that Russia desires does not fall into the U.S.'s foreign policy and, in fact, the United States wants to see Russia address the supposed violations of the 1987 Intermediate-Range Nuclear Forces (INF) treaty instead. Congress in the United States plays an important role, as those government representatives are the ones who decide whether to ratify a treaty or not. In the Ratification and Consent documents from the Senate for New START, the Senators included that in the next arms control treaty with Russia, the treaty must address and include tactical weapons, referencing Russia's cruise missiles.<sup>69</sup> The U.S. Congress also poses danger for the continuation of the arms control tradition, as the individual representatives do not always understand the scope and importance of nuclear

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<sup>66</sup> James M. Acton Remarks to the House Armed Services Subcommittee on Strategic Forces, District of Columbia, United States, 8 December 2015.

<sup>67</sup> Olga Olikier, "Unpacking Russia's New National Security Strategy," *Commentary*, Center for Strategic and International Studies, 7 January 2016.

<sup>68</sup> Caughley, interview by Samantha Pitz.

<sup>69</sup> Williams, interview by Samantha Pitz.

disarmament. As violations of the INF treaty about the testing of certain missiles are a serious accusation and are consistently a major issue of the U.S. with Russia, addressing those violations will be the most urgent and necessary problems that Russia needs to do before another sustainable nuclear arms control treaty can be negotiated.

## **VI. Conclusion**

In the international community when countries engage in any form of diplomacy that results in a legally binding agreement, those countries usually have ulterior motives to pursue the agreement or negotiations. But just because countries enter into agreements with ulterior motives does not mean that the agreement itself is any less productive, sustainable or beneficial to global nuclear security. This can be applied to the New START process with Russia and the United States, as Russia entered the negotiations with a purpose to retain its global position of power through a legally binding treaty and the United States wanted to curb the power of Russia by maintaining the arms control tradition. However those ulterior motives did not prevent the ratification of a treaty that reduced nuclear forces for both countries and established one of the most thorough verification protocols of any previous nuclear arms control treaty. The angling of both countries to achieve political and technical superiority under the pretense of strategic stability does not discount the substance and framework of New START.

New START is currently on track for successful implementation by the United States and Russia. The treaty has weathered the tensions between the two countries through military interventions, air strikes and backing opposing sides in Syria, and other diplomatic failures. Since the treaty is still being implemented that gives hope for the international community that New START will achieve its goals regarding reduction numbers, verification procedures, and transparency protocols. The threats to the sustainability are dangers—as the Russian military jargon would specify—but do not seem to jeopardize the arms control tradition. The

two countries, however, need to be sure to continue with confidence building measures in order for trust regarding reducing nuclear forces. Both countries are afraid of the other's weapons that are non-nuclear but still pose dangers for the survival of nuclear arsenals. It is key for both Russia and the United States to remember, "deterrence requires the ability to retaliate, not the ability to retaliate instantaneously."<sup>70</sup> The first-strike and second-strike capabilities are important, but strategic defensive weapons need to be addressed in the next arms control agreement to ensure deterrence and to prevent a new type of arms race. In the end, New START keeps Russia and the United States connected in a way that transcends current foreign policy conflicts.

Looking forward to proceeding nuclear arms control treaties, the framework needs to be broadened and contextualized for modern day threats and technologies. Nuclear disarmament continues to be an important process for security and stability around the world, but disarmament now has grown past only reducing the number of deployed warheads or delivery vehicles. As an international community, disarmament must be reframed to combat the growth of non-state actors that pose novel and complex threats to nuclear security. The nature of terrorism hinges on new forms of technology that allow individuals to hack into nuclear command and control of their weapons. The combination of a new context of terrorism and the continuation of Russia and the U.S. to keep nuclear weapons on hair-trigger alert puts the world in danger of accidental nuclear missile launch. As the process of nuclear disarmament continues worldwide these new threats to nuclear security must be addressed and since Russia and the U.S. are the pioneers of conducting arms control agreements, they would be the ideal countries to spearhead such an innovation for nuclear arms control.

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<sup>70</sup> Sessler, *Countermeasures: A Technical Evaluation*, 118.

## **Abbreviations**

ABM: Anti-Ballistic Missiles Treaty

BMD: Ballistic Missile Defense

EPAA: European Phased Adaptive Approach

ICBM: Intercontinental Ballistic Missiles

INF: Intermediate-Range Nuclear Forces Treaty

NATO: North Atlantic Treaty Organization

SLBM: Submarine-launched Ballistic Missiles

SALT: Strategic Arms Limitation Talks/Treaty

SORT: Strategic Offensive Reduction Treaty

START: Strategic Arms Reduction Treaty

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