

Spring 4-23-2015

# New START from Old Beginnings?

Michaela Ruhlmann

*Cedarville University*, [mruhlmann@cedarville.edu](mailto:mruhlmann@cedarville.edu)

Follow this and additional works at: [http://digitalcommons.cedarville.edu/history\\_capstones](http://digitalcommons.cedarville.edu/history_capstones)

 Part of the [Defense and Security Studies Commons](#), [History Commons](#), [International Law Commons](#), [International Relations Commons](#), [Law and Politics Commons](#), [Military, War, and Peace Commons](#), [National Security Law Commons](#), [Other Legal Studies Commons](#), [Other Public Affairs, Public Policy and Public Administration Commons](#), [Policy Design, Analysis, and Evaluation Commons](#), [Public Policy Commons](#), [Science and Technology Law Commons](#), and the [Science and Technology Policy Commons](#)

---

## Recommended Citation

Ruhlmann, Michaela, "New START from Old Beginnings?" (2015). *History Capstone Research Papers*. 2.  
[http://digitalcommons.cedarville.edu/history\\_capstones/2](http://digitalcommons.cedarville.edu/history_capstones/2)

This Capstone Project is brought to you for free and open access by DigitalCommons@Cedarville, a service of the Centennial Library. It has been accepted for inclusion in History Capstone Research Papers by an authorized administrator of DigitalCommons@Cedarville. For more information, please contact [digitalcommons@cedarville.edu](mailto:digitalcommons@cedarville.edu).

“New START from Old Beginnings?”

Michaela Ruhlmann

Senior Capstone Project

Research in American History

Dr. Mach

4/20/15

## **Glossary of Terms:**

- ALBM – Air Launch Ballistic Missile
- ASBM – Air-to-Surface Ballistic Missile
- CBO – Congressional Budget Office
- DOD – Department of Defense
- DOE – Department of Energy
- ICBM – Intercontinental Ballistic Missile
- MAD – Mutually Assured Destruction
- NATO – North Atlantic Treaty Organization
- NPR – Nuclear Posture Review
- NPT – Nuclear Nonproliferation Treaty
- SALT – Strategic Arms Limitation Treaty
- SLBM – Submarine Launched Ballistic Missile
- SSBN – Ship, Submersible, Ballistic, Nuclear
- START – Strategic Arms Reduction Treaty
- TNW – Tactical Nuclear Weapon
- U.S. – United States
- U.S.S. R. – United Soviet Socialist Republic
- WMD – Weapons of Mass Destruction

## Sections I: Introduction: Origin, Purpose and Development of START

There are many facets about the present world that are unique to its own time period. Some aspects are positives influences, flourishing and cultivating life on earth, while others are negative maladies that had never been imagined – let alone actualized – until recent history. Of all the many ills perpetrated in the current world, none are so blatant, so insidiously planned for the devastation of humanity, as nuclear weapons. This issue is a relevant controversy, pertinent for academic exploration and political solutions. The START treaties have been the most recent proposal to end the controversy.

The first ever nuclear project to be explored was the Manhattan project funded in the 1930's.<sup>1</sup> By 1941, the atomic bomb was developed<sup>2</sup> - the naissance of all nuclear weapons. To a world so naïve to the potential evil of mass explosives, the atom bomb appeared as a mind-blowing detriment. But they were unaware of the unfathomable reality that would soon enter this world, the bigger, more sinister evils that lay ahead. In December of 1942, scientists developed their “first controlled nuclear reactions chain.”<sup>3</sup> On July 16<sup>th</sup> 1945, Robert Oppenheimer “test[ed] the first atomic bomb.”<sup>4</sup> On August 6<sup>th</sup> 1945, Hiroshima was bombed.<sup>5</sup> On August 9<sup>th</sup> 1945, Nagasaki met the same fate.<sup>6</sup> Thus was the end of WWII for Japan and the United States.

While WWII had ended, atomic maturation had not. In 1951, the Hydrogen bomb (H-bomb) named “Mike,” entered the world.<sup>7</sup> In 1953, Russia followed in developing their own H-

---

<sup>1</sup> ushistory.org, “The Manhattan Project,” *U.S. History Online Textbook*, <http://www.ushistory.org/us/51f.asp>.

<sup>2</sup> Ibid.

<sup>3</sup> Ibid.

<sup>4</sup> Ibid.

<sup>5</sup> Jennifer Rosenburg, “The Atomic Bombing of Hiroshima and Nagasaki,” About Education, [http://history1900s.about.com/od/worldwarII/a/hiroshima\\_2.htm](http://history1900s.about.com/od/worldwarII/a/hiroshima_2.htm).

<sup>6</sup> Ibid.

<sup>7</sup> Ibid.

bomb.<sup>8</sup> Thus the two superpowers who had emerged from WWII as victors, engaged in a mutual hostility fueled by ideological, political and economic discord.<sup>9</sup> A nuclear arms race ensued.<sup>10</sup> In the midst of this race, a mindset of Mutually Assured Destruction (MAD) became the domineering mentality.<sup>11</sup> MAD guaranteed that should one side take detrimental action against the other, a retaliatory response of equal or near equal force would be reciprocated.

In the midst of this nuclear escalation, politicians realized the implications of their actions. Russia and the United States began to seek processes to reverse the growth of nuclear weapons. The most significant treaty, the Nuclear Nonproliferation Treaty (NPT), was signed in 1968 as a guarantee that no other countries could obtain, or seek to obtain, nuclear weapons.<sup>12</sup> The purpose of this treaty was to ensure that other countries would not proliferate nuclearly thus limiting the conflict between Russia and the United States. Further reductions included the Strategic Arms Limitation Treaty I (SALT I) in 1972<sup>13</sup> and Strategic Arms Limitation Treaty II (SALT II) in 1979.<sup>14</sup> SALT I and II aimed to reduce nuclear arms. But the Carter Administration never fully ratified SALT II. Due to rising hostility levels between the U.S., and U.S.S.R., the president was unwilling to sign SALT II. Thus, the legacy of the SALT treaties was ended.<sup>15</sup> Finally, in 1996, the Comprehensive Nuclear Test Ban Treaty was signed in 1996.<sup>16</sup> This treaty

---

<sup>8</sup> Mack LeMouse, "Brief History of Nuclear Weapons," Health Guidance, <http://www.healthguidance.org/entry/13709/1/Brief-History-of-Nuclear-Weapons.html>.

<sup>9</sup> Today I Found Out, "How did the Cold War Start and End," Daily Knowledge News Letter, <http://www.todayifoundout.com/index.php/2013/11/cold-war-start-end/>.

<sup>10</sup> Mack LeMouse, "Brief History of Nuclear Weapons."

<sup>11</sup> Ibid.

<sup>12</sup> Ibid.

<sup>13</sup> "Milestones: 1969-1976: Strategic Arms Limitation Talks/Treaty (SALT) I and II," *U.S. Department of State: Office of the Historian*, <https://history.state.gov/milestones/1969-1976/salt>.

<sup>14</sup> Ibid.

<sup>15</sup> "Salt I and II," The Cold War Museum, <http://www.coldwar.org/articles/70s/SALTIandII.asp>.

<sup>16</sup> "Comprehensive Nuclear Test Ban Treaty," Nuclear Threat Initiative: Building a Safer World, <http://www.nti.org/treaties-and-regimes/comprehensive-nuclear-test-ban-treaty-ctbt/>.

forbade any forms of nuclear experiments – any activities which yielded nuclear explosions – from occurring.<sup>17</sup>

All of these policy maneuvers inflicted moments of both success and failure. When President Ronald Reagan assumed office in 1981, however, nuclear weapon paradigms began to change. Reagan’s global mentality sought to bolster United States weaponry to deplete U.S.S.R. hegemony.<sup>18</sup> During his presidential office, Reagan conceived an idea that would carry beyond his own personal term in office.

When delivering the commencement address at Eureka College on May 9<sup>th</sup> 1982, Reagan outlined his perception of growing nuclear stockpiles.<sup>19</sup> The primary, destructive force that antagonized peace was “the growing instability of the nuclear balance.”<sup>20</sup> After giving up on the SALT treaties, which had failed to make substantial changes in nuclear reductions, he decided it was time to reform policies reducing nuclear weaponry. As he so quintessentially defined the nuclear policy’s purpose, Reagan asserted that

...our goal is to enhance deterrence and achieve stability through significant reductions in the most destabilizing nuclear systems, ballistic missiles, and especially the giant intercontinental ballistic missiles, while maintaining a nuclear capability sufficient to deter conflict, to underwrite our national security, and to meet our commitment to allies and friends.<sup>21</sup>

Thus a new idea was implanted in the policies of American government. The Strategic Arms Reduction Treaty was conceived. On that same night, the American public received a

---

<sup>17</sup> Ibid.

<sup>18</sup> Dinesh D’Souza, “President Reagan, Winning the Cold War.” quoted in “Ronald Reagan: Facts, Information, Articles about Ronald Reagan, the 40<sup>th</sup> U.S. President.” Historynet, <http://www.historynet.com/ronald-reagan>.

<sup>19</sup> Ronald Reagan, “Address at Commencement Exercises at Eureka College, Eureka, Illinois,” March 9, 1982, <http://www.reagan.utexas.edu/archives/speeches/1982/50982a.htm>.

<sup>20</sup> Ibid.

<sup>21</sup> Ibid.

foretaste of what would transpire in the next thirty years of American-Soviet nuclear history.

Reagan's purpose for reduction was clear. His request was direct:

For the immediate future, I'm asking my START...and that negotiating team to propose to their Soviet counterparts a practical, phased reduction plan. The focus of our efforts will be to reduce significantly the most destabilizing systems, the ballistic missiles, the number of warheads they carry, and their overall destructive potential.<sup>22</sup>

In the first phase, Reagan proposed to reduce nuclear levels "at least a third below the current levels,"<sup>23</sup> mandating half of all nuclear weapons to be stationed on land, and decrease the overall quantity of missiles.<sup>24</sup> The second phase would entail "equal ceiling on other elements of our strategic nuclear forces, including limits on the ballistic missile throw-weight at less than current American levels."<sup>25</sup> In the Geneva Summit in 1985, Reagan proposed START I to former U.S.S.R. president Gorbachev.<sup>26</sup>

It would appear that the original purpose of START – as conceived by Reagan – was to achieve a delicate nuclear balance between two competing countries caught in an Arms Race. As a response to the growing stockpile, START I sought to become a remedy that would equally but tactically reduce the presence of Weapons of Mass Destruction (WMD), which were deployed globally to maintain counterbalance. The fundamental value was to reduce forces, but preserve deterrence.

As history would unfold into the present, nuclear policy evolved. From the beginnings of START I, to the collapse of the Soviet Empire, to the fall and rise of new political leadership, to the creation of New START, it seems that time is not the only factor that has changed in history.

---

<sup>22</sup> Ibid.

<sup>23</sup> Ibid.

<sup>24</sup> Ibid.

<sup>25</sup> Ibid.

<sup>26</sup> "Strategic Arms Reduction Treaty (START I)," The Reagan Vision for a Nuclear Free World, <http://www.thereaganvision.org/strategic-arms-reduction-treaty-start-1/>.

In 2010, President Obama signed New START, a treaty that was, in many ways, much like its original predecessor, but in other ways quite different. New START invoked strong emotions in both political parties with one strongly approving it and the other fully disagreeing.

Julian Schofield, a Political Science professor at Concordia University, has argued that the START treaties, exemplary of all other nuclear arms control, have failed to preserve the balance of power, but have at best slowly reduced its escalation.<sup>27</sup> On the other hand, in 2009, USAF Lieutenant Colonel Heidi Paulson has affirmed the progress of START I and emphasized the need for deterrence in the world today.<sup>28</sup> By considering the purpose of START I and the recent development of New START, this paper proposes the following hypothesis: START I, as a historic principle, maintained global balance of power while New START has not accomplished the same ideals.

This paper will only measure “power balance” in terms of the quantity and quality of intercontinental ballistic missiles (ICBMs), submarine-launch ballistic missiles (SLBMs) and heavy bombers; as well as addressing the outside consequences. The success of each treaty will be determined according to what the individual time periods would classify as “balance of power.” To best accomplish this, this paper will evaluate both START I and New START, in their respective order, by assessing the origin and purpose of the treaties, their documented requirements, the implications of those requirements, the overall impact on other nuclear endeavors, and the extent to which the treaties’ obligations were (or are being) met. After

---

<sup>27</sup> Julian Schofield, “Arm Control and the Failure of Power Balance,” *Canadian Journal of Political Science.*, Vol. 33 No. 4, (February 15, 2005): 763, <http://journals.cambridge.org/action/displayFulltext?type=1&fid=279263&jid=CJP&volumeId=33&issueId=04&aid=279262&bodyId=&membershipNumber=&societyETOCSession=>. Cambridge University Press.

<sup>28</sup> Heidi Paulson, “Towards a New ‘New Nuclear Triad,’” Maxwell Airforce Base. (April, 2011): 12, 23, [http://www.researchgate.net/publication/235140499\\_Toward\\_a\\_New\\_New\\_Triad](http://www.researchgate.net/publication/235140499_Toward_a_New_New_Triad).

considering the treaties obligations, this paper will compare and contrast these two documents before concluding with principle for nuclear posture for the United States.

## Section II: START I

Jack Kemp, the congressman who served as House Secretary to George H.W. Bush, emphasized the absolute need for nuclear arms reduction. In speaking about the Reykjavik Summit at the Heritage Foundation in 1986, Kemp's conclusion was predicated on failing historic agreements and the changing condition of Soviet nuclear capacities.<sup>29</sup> In his own words "the Soviet Union today [was] more heavily armed, more bent on intimidation, brute force and subversion than at any time since Stalin. Forty years of seeking agreements to ease Soviet anxieties and to enhance Soviet confidence, forty years of ignoring soviet violations of agreements reached, [did not leave] the world safer, nor freedom more secure..."<sup>30</sup>

The combination of Reagan's personal legacy, his lingering ideals and Russia's cooperative measures orchestrated a perfect set-up for President George H.W. Bush to implement the nuclear treaty that Reagan had drafted. On January 31, 1991, Bush and U.S.S.R. President Gorbachev signed the Strategic Arms Reduction Act I.<sup>31</sup> START I was then ratified by Congress on December 5, 1994.<sup>32</sup> START I succeeded in preserving the balance of power and reducing overall nuclear stockpiles. To examine the implications of the treaty for global balance of power, the treaty itself must be examined to observe how its mandates pertained to global balance of power.

---

<sup>29</sup>Jack Kemp, "Reykjavik Summit: Realism or Détente?," Washington D.C. Jack Kemp Foundation, October 8, 1986, 3

<http://library.jackkempfoundation.org/files/0/MC4yNDgxODIwMCAxMzgxNTAwMjA2.pdf>.

<sup>30</sup> Ibid, 12.

<sup>31</sup> "The START I Treaty Text," Arms Control Association, July 31, 1991, <http://www.armscontrol.org/node/2493>, article I.

<sup>32</sup> Treaty between the United States of America and the Union of Soviet Socialist Republics on Strategic Offensive Reductions (START I)," NTI, <http://www.nti.org/treaties-and-regimes/treaties-between-united-states-america-and-union-soviet-socialist-republics-strategic-offensive-reductions-start-i-start-ii/>.

START I mandated that the following strategic weapons be reduced: “ICBMs and ICBM launchers, SLBMs and SLBM launchers, heavy bombers, ICBM warheads, SLBM warheads, and heavy bomber armaments.”<sup>33</sup> The final warhead counts, by the end of the treaty, would exceed no more than 1600 ICBM and SLBM deployed Launchers and 154 heavy ICBMs and their launchers.<sup>34</sup> Article II, paragraph one, section b limits heavy bombers, ICBM and SLBM warheads to a final maximum of 6,000 units.<sup>35</sup> START I also allotted “4,900, for warheads attributed to deployed ICBMs and deployed SLBMs, 1,100, for warheads attributed to deployed ICBMs on mobile launchers of ICBMs, 1,540, for warheads attributed to deployed heavy ICBMs.”<sup>36</sup>

This treaty would be implemented in three separate phases. When phase one expired – a phase extending 36 months after the treaty was contracted between the two parties – the total amount of nuclear arsenals are mandated to have surpassed no further than “2100, for deployed ICBMs and their associated launchers, deployed SLBMs and their associated launchers, and deployed heavy bombers; 9,150, for warheads attributed to deployed ICBMs, deployed SLBMs, and deployed heavy bombers; 8,050, warheads attributed to deployed ICBMs and deployed SLBMs.”<sup>37</sup> The sides agree that sixty months after START I has been signed, when phase two was complete, ICBMs, SLBMs, their launchers and heavy bombers would number a total of 1,900 units. The total number of ICBM and SLBM warheads would not exceed 7,950.<sup>38</sup> After phase three had passed, terminating at 84 months after signing, the U.S.S.R. and U.S. agreed that

---

<sup>33</sup> Ibid.

<sup>34</sup> “The START I Treaty Text,” Article II paragraph I section a.

<sup>35</sup> Ibid.

<sup>36</sup> Ibid, Article II, paragraph I, section b subparagraph i, ii, ii.

<sup>37</sup> Ibid, Article II, paragraph 2, section a subparagraph i-iii.

<sup>38</sup> Ibid, Article II, paragraph 2, section b subparagraph i-iii.

all ICBMs, SLBMs, their launchers, heavy bombs etc. would reach the final, aggregate numbers conditioned in START I.<sup>39</sup>

To avoid loopholes, Article V outlines the forbidden circumventions in this treaty. Paragraph two, sections a-g prohibit actions including manufacturing, testing, flight testing, or deploying ICBMs and/or SLBMs. Paragraph five specifies that one cannot produce a new type of ICBM or SLBM.<sup>40</sup> At the same time, paragraph ten suggests that one cannot deploy retired versions of ICBMs and/or SLBMs.<sup>41</sup> Other forms of loopholes would include launching an ICBM and/or SLBM as a delivery mechanism, thus misconstruing the warheads original purpose;<sup>42</sup> industrializing ballistic missiles with a range of 600 kilometers; deploying those ballistic missiles in non-territorial regions of the earth including ocean floors and the earth's thermosphere or exosphere; creating air-to-surface ballistic missiles (ASBM); and developing "long-ranged nuclear ALCMs [Air-launch cruise missiles] armed with two or more nuclear weapons."<sup>43</sup> In addition, paragraph 24, further specifies that neither party should seek to reconstruct nuclear heavy bombers into long-range ALCMs; non-nuclear heavy bombers into nuclear long-range ALCMs; creating or recreating anything into a heavy bomber when it was not previously such.<sup>44</sup>

Article VIII affirms what is permissible in the confines of this treaty in terms of dispersion. Paragraph one of Article VIII affirms that both parties "shall have the right to conduct exercise dispersal of deployed mobile launchers of ICBMs."<sup>45</sup> Paragraph 11, section II

---

<sup>39</sup> Ibid, Article II, paragraph 3.

<sup>40</sup> Ibid, Article V paragraph 2, sections a-g.

<sup>41</sup> Ibid, Article V, paragraph 10, sections a-b.

<sup>42</sup> Ibid, Article V, paragraph 15.

<sup>43</sup> Ibid, Article V, paragraph 18, section a-d.

<sup>44</sup> Ibid, Article V, paragraph 24, section a-d.

<sup>45</sup> Ibid, Article VIII, paragraph I.

of the Notification Protocol affirmed that the exercise dispersal should be reported to the other country within an 18 hour timeframe of the beginning of its beginning.<sup>46</sup> Article VIII paragraph one, subparagraph e also affirms that each party will notify the other when relocation of an ICBM is occurring and has arrived at its final destination.<sup>47</sup> This is further confirmed in the Notification Protocol in section 10, paragraph two.<sup>48</sup> All ICBMs that are awaiting relocations will be grouped as dispersals.<sup>49</sup> All exercise dispersals must be finalized by 30 days after the process is initiated.<sup>50</sup> Paragraph two discusses the same procedures for heavy bombers. According to Article VIII, paragraph two, subparagraph c, all air bases for heavy bombs – including those presently retired – are subject to removal.<sup>51</sup> During this time of removal, all inspections would cease until three days after this process was completed wherein inspections could resume.<sup>52</sup> This is consistent with paragraph 11 of section two in the Notification Protocol.<sup>53</sup> In requesting display, both countries must comply with cooperative measures, as dictated in subparagraph 1(c) of Article XII, wherein both countries openly exhibit their heavy bombers to the opposite country.<sup>54</sup>

Finally, According to Article XVII paragraph 2, the designated time this treaty would remain in full force was a total of fifteen years, after which the treaties could be updated in five year increments unless otherwise agreed upon by future governments before the date of

---

<sup>46</sup> “Notification Protocol,” Arms Control Association, July 31, 1991, section II, paragraph XI, <http://www.armscontrol.org/node/2493>.

<sup>47</sup> “The START I Treaty Text,” Article VIII, paragraph 1, subparagraph e.

<sup>48</sup> “Notification Protocol,” Section 2, paragraph 10.

<sup>49</sup> “The START I Treaty Text,” Article VIII, paragraph 1, subparagraph f.

<sup>50</sup> Ibid, Article VIII, paragraph 1, subparagraph g.

<sup>51</sup> Ibid, Article VIII, paragraph 2, subparagraph c.

<sup>52</sup> Ibid, Article VIII, paragraph 2, subparagraph f.

<sup>53</sup> “Notification Protocol,” section 2 paragraph 11.

<sup>54</sup> “The START I Treaty Text,” Article VIII, paragraph 2, subparagraph g.

expiration.<sup>55</sup> Paragraph 3 affirmed the right for either contractor to withdraw from the treaty altogether.<sup>56</sup>

Pulling away from the text, it would seem as if START I encouraged and/or implemented balance of power in six primary ways. First, the treaty opens with a finalized goal toward which Russia and the United States would strive. Not only was the quantity of arms reduced, but the time restriction would ensure that disarmament would occur at a relatively similar rate thus expediting the process. The timeframe amalgamates the treaty's ideals with realistic expectations and circumstances. By eliminating hesitations between Russia and the U.S. – an indefinite period of waiting, in deciding “who first would lower the gun” – *both* countries were subjected to the same dictations and time restraints that would ensure immediate action.

Second, as was seen in Article V, both retired and futuristically developed weapons were considered to be “umbrellaed” within the confines of this treaty. This would preempt both sides from restocking or resurrecting their stockpile development terminating, not just the source of nuclear production as known in the present, but future development as well. This also terminated the ability to resurrect antiquated, yet fully capable, destructive ICBMs or SLBMs. Strategically, the treaty does not assume only the weapons in current production. It predicts the future and preempts the past. Both sides were bound to include all nuclear warheads under this treaty.

Third, START I preventively covered territorial exceptions and geographical disclaimers. Rather than specifying arsenal deployment within territorial posturing, START I outlined the restrictions of ocean zones (much of which was largely established as “international waters”) and

---

<sup>55</sup> Ibid, Article XVII, paragraph 2.

<sup>56</sup> Ibid, Article XVII, paragraph 3.

outer space; these territories had previously been regarded as unclaimable territory.<sup>57</sup> Thus, the treaty reified the demilitarized conditions of these zones by preserving the international condition of air space and waters. Neither side could seize these domains – both were obligated to confine their geographical deployments to the treaty’s restrictions.

Fourth, Article V of the treaty also addresses the notion of converting instruments into heavy bombers– objects that would have continued nuclear production. This limits how one utilizes their resources and the manner of which one may circumvent enhancing or modifying for technological advantages. The act of producing was not the only target to eliminate in the treaty, but also creating, recreating, reinventing, adding, converting etc. Both sides were obligated to abide by the same law restricting the development of nuclear warheads.

Fifth, Article VIII affirms the open communication in the entire process of relocation. Mandatory transparency, according to the Notification Protocol, establishes open communication. Not only was this in accordance to the political scenario envisioned by Reagan and Bush,<sup>58</sup> it also ensured at least some level of accountability. The inspections after nuclear weapons had been relocated would minimize the possibility of dishonesty between one or both parties. Both sides were required to maintain honest communication.

Finally, START I allowed either party to withdraw from the treaty at any moment. There was no exception or one-sided provision. Both countries obliged by the same principles and

---

<sup>57</sup> FindLaw UK, “What is meant by international waters and airspace?” Thomas Rueters, [http://www.findlaw.co.uk/law/government/other\\_law\\_and\\_government\\_topics/500439.html](http://www.findlaw.co.uk/law/government/other_law_and_government_topics/500439.html).

<sup>58</sup>As Bush had mentioned in his pre-office speech regarding arms reduction, that ‘we should elevate the dialogue, especially between you and me, above the details of arms control proposals...’ George H.W. Bush, Proclamation. “President-Elect Bush Informs Mikhail Gorbachev of His Need for Time to Formulate New Policies,” *Making the History of 1989*, Item #140, <http://chnm.gmu.edu/1989/items/show/140>.

could withdraw for any reason. This neutralized the obligations as perfectly equal without emphasizing fault on one side over another.

All in all, Reagan's action sought to reduce nuclear weapons, but still preserve a lingering remnant that would provide stability.<sup>59</sup> Because of this, the overall global balance of power between the two countries was not upset. It would appear that, on Reagan's definition, global balance of power was accomplished *through* reducing nuclear weapons. But in so preserving some, both sides would still have some areas of influence and power. Thus peace was less likely to be jeopardized in a power vacuum.

But in order to examine the *true* actualization of power balance, one must evaluate what *actually* happened to determine the success or failure of a treaty. To measure effective balance of power, I will examine the Lisbon Treaty, START II and the total number of nuclear weapons present throughout the duration of the treaty.

Immediately following the initiation of START I, the empire of the U.S.S.R. officially collapsed. Countries once adjoined to the empire now found themselves independent. To preserve both the U.S. and Russia maintaining equal balance of power, the newly independent countries – Belarus, Ukraine, and Kazakhstan – were “shanghaied” into signing the same protocols with slight modifications. The Lisbon Protocol established regulations that would preserve balance of power between Russia and the U.S. It did so by proactively negating any ability to garner nuclear power from the newly liberated countries.

---

<sup>59</sup> Douglas J. Hoekstra, "Presidential Beliefs and the Reagan Paradox," *Presidential Studies Quarterly*, no. 3 (1997), 27, <http://www.questia.com/read/1G1-20084319/presidential-beliefs-and-the-reagan-paradox>.

The Lisbon Protocol was a five party agreement between the United States, Russia, Ukraine, Belarus and Kazakhstan.<sup>60</sup> The newly liberated countries were required to follow the previous agreements in START I.<sup>61</sup> Unlike what START I previously described, however, they were compelled to exist as nuclear free states abiding by the failed Non-Proliferation Treaty of 1968.<sup>62</sup>

Eliminating the nuclear question stabilized the United States and Russia power balance *indirectly* by preemptively answering the option of controlling other countries' nuclear arsenals. Togzhan Kassenova, an associate in the Nuclear Policy Program at Carnegie Endowment, argues that this is especially important when regarding Kazakhstan, and the rest of central Asia:

First, after the Cold War ended, Kazakhstan possessed numerous Soviet nuclear weapons within its borders... each of the Central Asian republics had components of the Soviet nuclear complex within their territory... the establishment of a nuclear-weapon-free zone in Central Asia also signifies the creation of a disarmament "pocket" in a volatile region of the world where nuclear ambitions are running high and proliferation dangers are significant.<sup>63</sup>

Restricting nuclear capacities could have likely prevented diplomatic contingencies that would have occurred between Russia and the United States. The concern was not that these countries would proliferate, but that their nuclear stockpile would be coveted by both superpowers for their strategic positions. The former would desire security while the latter could see such close proximity as a chance for offensive barricades. From this, the Lisbon Protocol stabilized power balance by restricting any possibility for acquiring nuclear weapons.

---

<sup>60</sup> "Protocol to the Treaty Between the United States of America and the Union of the Soviet Socialist Republic on the Reduction and Limitations of Strategic Offensive Arms," Arms Control Association, July 31, 1991, <http://www.state.gov/www/global/arms/starthtm/start/lisbon.html#lisbonPROTOCOL> Article I.

<sup>61</sup> *Ibid*, Article II.

<sup>62</sup> *Ibid*, Article V.

<sup>63</sup> Togzhan Kassenova, "The Struggle for a Nuclear Free Zone in Central Asia," *Bulletin of Atomic Scientists*, December 22, 2008, <http://thebulletin.org/struggle-nuclear-weapon-free-zone-central-asia>.

But did nuclear reductions actually work? When considering the quantitative analysis of nuclear weapons, one can see a dramatic decrease from an aggregate perspective. In 1998, approximately seven years after signing START I, the United States had decreased from 19,008 in 1991 nuclear weapons to 10,732 nuclear weapons.<sup>64</sup> This means that the United States eliminated a total of 8,276 weapons – an approximate decrease of 43.5%. Likewise, Russia's figures had significantly dropped from 35,000 nuclear weapons in 1991 to 22,500 nuclear weapons in 1998.<sup>65</sup> This means Russia removed a total of 12,500 weapons, decreasing their overall stockpile by approximately 35.7%.

By June 16<sup>th</sup> and 17<sup>th</sup> of 1992, President Bush and President Boris Yeltsin mutually consented to advance further nuclear arms reductions.<sup>66</sup> Thus, on January 3<sup>rd</sup> 1993, START II was signed.<sup>67</sup>

START II further actualized START I.<sup>68</sup> The primary difference between START I and II was the definition of a single “unit” for heavy bombers. In the former, a unit was defined as a “deployed heavy bomber,”<sup>69</sup> whereas the latter defined a unit “by counting the number of warheads each heavy bomber is actually capable of carrying.”<sup>70</sup> In addition, START II also allowed countries to transform a maximum of 100 heavy bombers for other purposes.<sup>71</sup>

However, this treaty was annulled in 2002, when President George W. Bush withdrew from the

---

<sup>64</sup> Robert S. Norris and Hans M. Kristensen, “Global Nuclear Weapon Inventories: 1945-2010,” *Bulletin of the Atomic Scientists*, vol. 66, no. 4, (July/August 2010): 82, <http://bos.sagepub.com/content/66/4/77.full.pdf+html>.

<sup>65</sup> Ibid.

<sup>66</sup> “Nuclear Chronology,” Office of the Under Secretary of Defense for Acquisition, Technology and Logistics 2011, 14, <http://www.acq.osd.mil/ncbdp/nm/images/NuclearChronology.pdf>.

<sup>67</sup> Ibid, 15.

<sup>68</sup> “Treaty between the United States of America and the Union of Soviet Socialist Republics on Strategic Offensive Reductions (START II),” NTI: Building a Safer World, <http://www.nti.org/treaties-and-regimes/treaty-between-united-states-america-and-union-soviet-socialist-republics-strategic-offensive-reductions-start-ii/>.

<sup>69</sup> The START I Treaty Text,” Article II, paragraph I, subsection b.

<sup>70</sup> “Treaty between the United States of America and the Union of Soviet Socialist Republics on Strategic Offensive Reductions (START II),” NTI.

<sup>71</sup> Ibid.

ABM treaty.<sup>72</sup> Although failed, START II did keep open negotiations that continued into the second decade of the twenty first century.

On January 4<sup>th</sup> of 2007, Henry Kissinger, George P. Shultz and William J. Perry proposed unilateral disarmament of the United States advocating that they should “pave the way” by fully abiding by the Nuclear Nonproliferation Treaty (NPT).<sup>73</sup> Although the U.S. did not implement this policy, further reductions were pursued. In March of the same year, Russia and the United States spoke of possibly extending certain elements within START I.<sup>74</sup> In July, Bush and Putin casually discussed plans for after its expiration date in 2009. Both sides were interested in continuing nuclear reductions.<sup>75</sup> These motives were confirmed on April 7<sup>th</sup>, 2008, when Putin affirmed that he would like to continue the essential components of START.<sup>76</sup> Dialogues began on May 18<sup>th</sup>, 2009.<sup>77</sup> On April 8<sup>th</sup>, 2010, President Barak Obama and Russian President Medvedev signed the official New Strategic Arms Reduction Treaty.<sup>78</sup>

In evaluating START I, it has accomplished its fundamental purposes as suggested by President Reagan. In his address at Eureka College Reagan detailed a specific vision for a new nuclear paradigm, sought to renovate nuclear policy and decrease its overall effect. His goals were to decrease nuclear stockpiles while still maintaining the concept of deterrence. Both were preserved. Since the collapse of the U.S.S.R., tensions with Russia never appeared to dominate political relations. Jack Kemp, as influential and charismatic as he was while serving as the

---

<sup>72</sup> Ibid.

<sup>73</sup> George P. Schultz, William J. Perry et. al, “A World Free of Nuclear Weapons,”*The Wall Street Journal*. January 4, 2007, <http://www.wsj.com/articles/SB116787515251566636>.

<sup>74</sup> “Treaty between the United States of America and the Union of Soviet Socialist Republics on Strategic Offensive Reductions (START II),” NTL.

<sup>75</sup> Treaty between the United States of America and the Union of Soviet Socialist Republics on Strategic Offensive Reductions (START I),” NTL.

<sup>76</sup> Ibid.

<sup>77</sup> Ibid.

<sup>78</sup> U.S. Department of State: Diplomacy in Action, under “New START Timeline.”

White House Secretary, kept invigorating the vein of Reagan's ideals alive in the Bush administration. This ideological transfer guaranteed the survival of START I, actualizing it from idea to treaty. The conditions of the START I ensured a negotiable treaty that preempted loopholes, secured reductions, and clarified notification procedures. This formulated an in-depth treaty, viable in idea, writings and execution. The numerical figures substantiated the overall effects of START I. In 1984, ending Reagan's first administration, nuclear stockpile levels were shockingly high reaching 23,459 nuclear weapons for the United States and 38,825 nuclear weapons for Russia.<sup>79</sup> By the end of 1998, the expiration of START I, the figures were reduced by half.<sup>80</sup> Contrary to the assumptions made by Julian Shofield, there was a marked difference between nuclear stockpile levels.

---

<sup>79</sup> Hans M. Kristenson and Robert S. Norris, "Global nuclear weapons inventories, 1945–2010."

<sup>80</sup> Ibid.

### Section III: New START

In 2008, former Secretary of Defense, Robert Gates implored further reducing nuclear arsenals. But his suggestions overlooked diplomatic negotiations within the Asiatic regions. Specifically, the most precarious regions that necessitated diplomacy were Pyongyang and Tehran. On October 28<sup>th</sup>, 2008 at the Carnegie Endowment for International Peace, Gates admitted that while reduction served beneficial purposes, there was no foreseeable future which reduced nuclear weapons in totality.<sup>81</sup> Gates proposed that, "...the fundamental nature of man hasn't changed – and that our adversaries and other nations will always seek whatever advantages they can find... the power of nuclear weapons and their strategic impact is a genie that cannot be put back in the bottle – at least for a very long time..."<sup>82</sup> And concluding with the purpose of his nuclear policies, Robert Gates concluded: "Our goal is, in part, to reduce their [rogue countries] ability to hold other nations hostage, and to deny them the ability to project power."<sup>83</sup>

He maintained his position in May of 2010 when he mentioned five primary reasons he approved of New START. First, he said, it promulgated a biconditional agreement instigating reduction between the U.S. and Russia.<sup>84</sup> Second, New START would preserve the U.S. nuclear core (the Triad – ICBM, SBLM and heavy bombers) supporting its hegemonic posture for the U.S.'s allies security.<sup>85</sup> Third, the U.S. current weaponry could be modernized under this treaty,

---

<sup>81</sup> Robert Gates, "Carnegie Endowment for International Peace (Washington, D.C.)," October 28, 2008, <http://www.defense.gov/speeches/speech.aspx?speechid=1305>.

<sup>82</sup> Ibid.

<sup>83</sup> Ibid.

<sup>84</sup> Robert Gates, "The Case for a New START Treaty," *U.S. Strategic Command. U.S. Strategic Command*. May 13, 2010, [http://www.stratcom.mil/news/2010/159/The\\_Case\\_for\\_the\\_New\\_START\\_Treaty/](http://www.stratcom.mil/news/2010/159/The_Case_for_the_New_START_Treaty/).

<sup>85</sup> Ibid.

unlike START I.<sup>86</sup> Fourth, offensive weaponry in the form of strategic missiles would still be permissible to deploy.<sup>87</sup> Fifth, the United States would still possess global strike abilities throughout the world with the remaining offensive arms deployed.<sup>88</sup>

Approbations were expressed. In the “Senate Armed Services Subcommittee: Hearing On New START Implementation,” Dr. James Miller, who serves as Under Secretary of Defense for Policy under Obama, supported New START on the basis that it would still preserve effective deterrence.<sup>89</sup>

In addressing the subject of Nuclear weapons, President Obama mentioned on April 5, 2009 in Prague, Czechoslovakia that the United States “has a moral responsibility to act,”<sup>90</sup> and emphatically declared, “I state clearly and with conviction America's commitment to seek the peace and security of a world without nuclear weapons.”<sup>91</sup> In further confidence with his conviction, he clarified “I'm not naive. This goal will not be reached quickly – perhaps not in my lifetime. It will take patience and persistence. But now we, too, must ignore the voices who tell us that the world cannot change. We have to insist, "Yes, we can."<sup>92</sup> Of most notable importance, then, is this: in contrast to Reagan, who advocated continuously preserving a core of nuclear deterrence, Obama’s nuclear paradigm was to eventually reach a world entirely free of nuclear weapons. With this mentality would he then promote the signing of New START. New START

---

<sup>86</sup> Ibid.

<sup>87</sup> Ibid.

<sup>88</sup> Ibid.

<sup>89</sup> Gen. Kevin P. Chilton, “Senate Armed Services Subcommittee - Hearing On New START Implementation.” U.S. Strategic Command. July 20th, 2010, [http://www.stratcom.mil/speeches/2010/43/Senate\\_Armed\\_Services\\_Subcommittee\\_-\\_Hearing\\_On\\_New\\_START\\_Implementation/Senate\\_Armed\\_Services\\_Subcommittee\\_-\\_Hearing\\_On\\_New\\_START\\_Implementation](http://www.stratcom.mil/speeches/2010/43/Senate_Armed_Services_Subcommittee_-_Hearing_On_New_START_Implementation/Senate_Armed_Services_Subcommittee_-_Hearing_On_New_START_Implementation).

<sup>90</sup> President Barak Obama, “Remarks by President Barak Obama,” Hradcany Square, Prague, Czech Republic, The White House: Office of the Press Secretary, April 5, 2010, [http://www.whitehouse.gov/the\\_press\\_office/Remarks-By-President-Barack-Obama-In-Prague-As-Delivered](http://www.whitehouse.gov/the_press_office/Remarks-By-President-Barack-Obama-In-Prague-As-Delivered).

<sup>91</sup> Ibid.

<sup>92</sup> Ibid.

was then a step in the direction of this paradigm, although the goal of New START was to equalize forces at a much lower level, between Russia and the United States.

In April, 2010, the Department of Defense – under the Obama Administration – outlined the Nuclear Posture Review (NPR). The Nuclear Posture Review was a summation of the administrations nuclear objectives. The NPR maintained a consistent view with Obama’s vision for a world free of nuclear weapons. This is a serious goal of the administration.<sup>93</sup> But New START, as a first step to the NPR, affirmed maintaining a harmonious balance with Russia by reducing nuclear weapons.<sup>94</sup> In addition, it prioritized subverting nuclear proliferation endeavors by North Korea and Iran.<sup>95</sup> Thus the NPR suggests that global balance of power in the nuclear field is a priority.

According to the Nuclear Posture Review, in 2010 the government outlined a nuclear free vision through New START with the following synopsis:

A key focus of the 2010 NPR was therefore to bring our nuclear weapons policies and force posture into better alignment with today’s national security priorities. To that end, the NPR decided on a number of steps, many of which have already been initiated or will be pursued in the near term...

- Seek ratification and implementation of the New Strategic Arms Reduction Treaty (New START) requiring substantial reductions in deployed U.S. and Russian nuclear forces...
- Complete the Presidentially-directed review of post-New START arms control objectives, to establish goals for future reductions in nuclear weapons, as well as evaluating additional options to increase warning and decision time, and to further reduce the risks of false warning or misjudgments relating to nuclear use; and

---

<sup>93</sup> Department of Defense. “Nuclear Posture Review Report.” April 2010, vii, <http://www.defense.gov/npr/docs/2010%20Nuclear%20Posture%20Review%20Report.pdf>.

<sup>94</sup> Ibid, x.

<sup>95</sup> Ibid, 9.

- Initiate a comprehensive national research and development program to support continued progress toward a world free of nuclear weapons, including expanded work on verification technologies.<sup>96</sup>

The NPR is the most critical element in addressing New START within its ideological context. The DOD, representing the Obama administration, published the NPR detailing the administration's goals of how the DOD, through Obama's policies, intend to handle the nuclear crises in the present circumstances. Obama, with his hope of a nuclear free world, drafted New START as a step for his paradigm, a world free of nuclear weapons. The NPR, also published in April, 2010 (contemporary with New START's signing) is the summation of that paradigm. *New START is one step in that direction to a nuclear zero world.* Thus, New START itself does not discuss other countries, but was drafted as a branch off the NPR – which *does* discuss the nuclear situation in other countries – to preserve global stability. Inevitably, the results that New START would bring, would also reflect on the overall paradigm's success in the NPR.

Given that New START is an extension of the NPR, this would also suggest that, as later discussed, not only does the treaty uphold a desire for a global balance of power, but also its ideological origins suggest that nuclear elimination is necessary. The NPR states on page 28 that “[The NPR] seeks...an overall balance of conventional military power that serves the purposes of security and peace.”<sup>97</sup>

The administration drafted this treaty recognizing these existing problems. The NPR outlines the Obama administrations' nuclear policy, recognizes the threat of North Korea and Iran, and suggests the administrations tactics towards the two countries.<sup>98</sup> But later, the National Public Review suggests that, given the reductions in nuclear weapons that they wished to pursue

---

<sup>96</sup> Department of Defense, “Nuclear Posture Review Report,” April 2010, 46-47.

<sup>97</sup> Ibid, 28.

<sup>98</sup> Ibid, 9.

at the time, the United States would still have ample abilities to respond as necessary.<sup>99</sup> Yet New START, as an extension of that mentality, has raised questions of security for the U.S.'s allies.

In short, the relationship between the NPR and New START can best be described as a 'big goal' verses 'small goal' picture. The NPR is the nuclear ideology at large. New START is a small step for that ideology. While New START does not outline – or make reference to – the NPR, there is a logical connection between the two. Obama himself would admit, after signing New START with Medvedev that this was “an important first step forward, it is just one step on a longer journey. As I said last year in Prague, this treaty will set the stage for further cuts. And going forward, we hope to pursue discussions with Russia on reducing both our strategic and tactical weapons, including non-deployed weapons.”<sup>100</sup>

The connection between the NPR and New START holds significance for the following reason: Reagan reduced nuclear weapons and established a balance of power by preserving a nuclear force. Obama, on the other hand, seeks to further maintain balance of power *through fully eradicating nuclear weapons altogether*. Russia, the United States and the rest of the world would be equalized in the nuclear field because the world by liberating them from it completely. Global balance of power is achieved through ridding the world of nuclear weapons.

Having settled the goal of the NPR – to free the world of nuclear weapons – treaty of New START can now be evaluated. The benefits of global security in New START are constantly affirmed. A perceived common desire for stability was publically acknowledged by former Russian president, Dmitry Medvedev. In Medvedev's words:

...[W]e aimed at the quality of the treaty...within a short span of time we prepared a full-fledged treaty and signed it...This agreement enhances strategic stability and, at the same

---

<sup>99</sup> Ibid, 31.

<sup>100</sup> Obama Proclamation, “Remarks by President Obama and President Medvedev of Russia at New START Treaty Signing Ceremony and Press Conference,” The White House, April 8, 2010, <http://www.whitehouse.gov/the-press-office/remarks-president-obama-and-president-medvedev-russia-new-start-treaty-signing-cere>.

time, enables us to rise to a higher level for cooperation between Russia and the United States... the treaty also includes provisions concerning data exchange...the treaty also includes provisions concerning conversion and elimination, inspection provisions and verification provisions as well as confidence-building measures.<sup>101</sup>

The treaty possesses benefits so it was signed. But this does not address the purpose of the document, just its pragmatic value. Unlike Reagan and Kemp who demanded the urgency of this request based on the principle of balance of power, Gates, Obama and Medvedev approve for a functional task. The purpose of Obama's nuclear policy is to aim for a global nuclear zero.

Article I of the treaty states that end number of nuclear arms includes the following numbers:

700, for deployed ICBMs, deployed SLBMs, and deployed heavy bombers... 1550, for warheads on deployed ICBMs, warheads on deployed SLBMs, and nuclear warheads counted for deployed heavy bombers... [and] 800, for deployed and non-deployed ICBM launchers, deployed and non-deployed SLBM launchers, and deployed and non-deployed heavy bombers.<sup>102</sup>

According to article III of New START, each individual ICBM, SLBM and heavy bomber will be counted as one individual unit.<sup>103</sup> To count a single nuclear warhead is described as whatever reentry vehicle is placed within the ICBM or SLBM.<sup>104</sup> Only one nuclear warhead would be ascribed per heavy bomber.<sup>105</sup>

Under paragraph seven of Article III, missiles used for purposes of interception when their target objects are not grounded are not included as acting beyond the range of this treaty.<sup>106</sup> Heavy bombers that are not equipped with nuclear warheads are not included as being a

---

<sup>101</sup> Ibid.

<sup>102</sup> "New Strategic Arms Reduction Treaty (New START)," April 8, 2010, article II, sections a-c.

<sup>103</sup> Ibid, Article III, paragraph 1, section a-c.

<sup>104</sup> Ibid, Article III, paragraph 2, section a.

<sup>105</sup> Ibid, Article III, paragraph 2, section b.

<sup>106</sup> Ibid, Article III paragraph 7, section a.

candidate for reduction.<sup>107</sup> Thus, under New START, it is possible for missiles to be developed as a part of their militaristic pursuit.

Article V of the treaty also forbids converting or reconverting non-nuclear missiles into nuclear weapons.<sup>108</sup> Unique to article V is the ability for other countries to challenge each other according to the Bilateral Consultative Commission (a commission establishing the treaty's applications) should they see an emergence of a new strategic, offensive weapon.<sup>109</sup>

Article VI dictates that notifications are required to be issued when both sides exercise any form of reduction to ensure good communication.<sup>110</sup> According to Article VII, paragraph two 'Each Party shall notify the other Party about changes in data and shall provide other notifications in a manner provided for in Part Four of the Protocol to this Treaty.'<sup>111</sup> This article encouraged openness between the two countries. Article IX also indicated that telemetric communication would occur 'on a party basis.'<sup>112</sup> Finally, Article X dictates that neither party can somehow impede communication and verification processes for the treaty, nor prevent other measures that would somehow enforce those processes.<sup>113</sup>

Article XI permits both countries to inspect nuclear weaponry development at various bases.<sup>114</sup> Both parties have the explicit ability to inspect the other's arsenal development within the vicinities specified in section VII of Part five of the START Treaty Protocol.<sup>115</sup>

---

<sup>107</sup> Ibid, Article III, paragraph 7, section b.

<sup>108</sup> Ibid, Article V paragraph 3.

<sup>109</sup> Ibid, Article V, paragraph 2.

<sup>110</sup> Ibid, Article VI paragraph 2.

<sup>111</sup> Ibid, Article VII paragraph 2.

<sup>112</sup> Ibid, Article IX.

<sup>113</sup> Ibid, Article X paragraph 1-2.

<sup>114</sup> Ibid, Article XI paragraph 2.

<sup>115</sup> Ibid, Article XI paragraph 3.

As a part of the impact of New START, “The Case for the New Strategic Arms Reduction Treaty” published by Arms Control Association details the continuation of New START principles including “inspections...exhibitions...data exchanges... and notification related to strategic offensive arms.”<sup>116</sup> The Department of State elaborates that there are two different inspections: type one inspections, which encompass both deployed and non-deployed strategic weaponry, and type two inspections which exclusively reviews non-deployed strategic weaponry.<sup>117</sup> Unique to New START is its provisions for missile testing five times per year.<sup>118</sup> Also differing from START I is that New START “does not meaningfully limit missile defenses or long-range conventional strike capabilities.”<sup>119</sup> In other words, there are some offensive weapons that are not as restricted under the conventions of this treaty.

A primary motivation for implementing New START including preserving global balance of power as previously listed in the first, third and fourth point of the NPR and further elaborated in its objectives. History has not unfolded to reveal the long-term impact of New START and the further negotiations that would proceed from it. But what *can* be seen can be evaluated.

It appears that New START has created a deeper impact in terms of reducing offensive weaponry. According to the Congressional Research Service, performed by Amy F. Woolf, the DOD maintained a strategic posture including “14 submarines with 20 launchers on each

---

<sup>116</sup> Tom Z. Collina, Daryl G. Kimball, et. al, “The Case for New Strategic Arms Reduction,” An Arms Control Association Brief, December 2010, [http://www.armscontrol.org/system/files/NewSTART\\_Report\\_FINAL\\_Nov\\_30.pdf](http://www.armscontrol.org/system/files/NewSTART_Report_FINAL_Nov_30.pdf).

<sup>117</sup> “New START,” *U.S. Department of State: Diplomacy in Action*.

<sup>118</sup> Collina, Kimball et. al. “The Case for Nuclear Arms reduction,” 13-14.

<sup>119</sup> *Ibid*, 14.

submarines...these submarines [would] count as carrying 240 deployed launchers within a total of 280 deployed and non-deployed launchers.”<sup>120</sup>

The same research also suggests that Russia will inevitably reduce their forces because of their current standing as of 2014. Amy Woolf, nuclear policy specialist, suggests that “Russia will almost certainly deploy fewer than the permitted number of deployed and nondeployed launchers under New START...” she argues that this is primarily true since Russia possesses 491 launchers (approximately 300 launchers below of New START maximum requirements); she predicts that levels will continue to decrease; and states that their disarmament is inevitable since Russia continually replaces antiquated arsenals with better updates.<sup>121</sup>

In short, what can be evaluated here is the following: first, New START – through the NPR – was formed under the premise of maintaining global balance of power which would take into consideration other nuclear-possessing countries beyond the United States and Russia. The purposes thus differ from START I which merely sought balance with Russia. Second, the tactics also differ from START I and New START. Whereas the specific, isolated START I details in great length the geography, notification, and conversion, New START either failed to elaborate (thus extend) such terms or barely addressed them at minimal. Although both treaties – in terms of showing some form of reduction – have been or are being implemented, the extent of which these treaties actually accomplished their purposes shall be addressed in this next section.

---

<sup>120</sup> Amy F. Woolf “The New START Treaty: Central Limits and Key Provisions”. Congressional Research Service, August 27, 2010, <https://www.fas.org/sgp/crs/nuke/R41219.pdf>.

<sup>121</sup> Ibid, 22.

## Section IV: Analysis

Although START I and New START were conceived and drafted in separate times of history, both possess relatively comparable features. In Reagan's era, the central defining issue was eliminating the growing stockpiles between the two nuclear domineering countries. Thus in the height of the Cold War, obtaining global balance of power indicated a mutual agreement to reduce both U.S. and U.S.S.R. weaponry. In the midst of a post-Cold War era, the NPR's objectives can deduce an end-goal of global balance of power.<sup>122</sup> Both START I and New START suggested global balance of power *according to their unique timeframe* – the former paradigm exclusively addressing the two competing superpowers, the latter facing circumstances with outside menacing, competing nuclear states – namely the rogue nations of Iran and North Korea. The two treaties possessed similar motivations.

Both treaties reduce the nuclear triad, emphasizing strategic weaponry in the forms of ICBM, SLBMs, and heavy bombers. Neither treaties address nonstrategic nuclear weaponry, tactical nuclear weapons. Similarly, START I and New START restrict numerical value of nuclear warheads the former reducing them to 6,000 warheads, the latter to 1,500 warheads.<sup>123</sup> Thus, in terms of tactics, these treaties also display similarity.

In terms of nuclear reduction, both START I and New START accomplished this goal. This is the verdict: Between the years of 1990 and 1991, ICBM launchers dropped from 1,000 to 550.<sup>124</sup> ICBM warheads also dropped from 2,440 to 2,000.<sup>125</sup> From 1990 -1992, overall nuclear

---

<sup>122</sup> Department of Defense, under "Nuclear Posture Review Report," April 2010, iii.

<sup>123</sup> Bureau of Verification, Compliance and Implementation, "Comparison of START Treaty, Moscow Treaty, and New START Treaty," U.S. Department of State, April 8, 2010, <http://www.state.gov/t/avc/rls/139901.htm>.

<sup>124</sup> "Table of U.S. ICBM Forces." Natural Resources Defense Counsel, <http://www.nrdc.org/nuclear/nudb/datab3.asp>.

<sup>125</sup> Ibid.

weapon stockpiles decreased from 19,008 to 11,511.<sup>126</sup> As of September 1<sup>st</sup>, 2012, the U.S. had 449 deployed ICBMs and 500 deployed warheads.<sup>127</sup> By 2018, Tom Z. Collina – research director of Arms Control Association – argues that ICBM levels will decrease to 420 Minuteman III, and ICBM warheads to a total number of 420.<sup>128</sup> 2012 figures estimated SLBM levels at 239 and their warheads at 1,100.<sup>129</sup> Collina predicts that in 2018 SLBM numbers will barely rise to 240 and their warheads from 1,043 in 2013 to 1,070.<sup>130</sup> In 2012, the number of deployed heavy bombers was approximately 118.<sup>131</sup> In his research, Collina differentiated their strategic bombers into two categories – B52G (and B52H) bombers and B-2A bombers. In 2013, 101 B-52G and B-52H bombers were deployed, compared to 10 B-2A bombers. In 2018, those figures are expected to drop for B-52G and B-52H bombers to 42 bombers, but rise for B-2A bombers to a total of 18 bombers.<sup>132</sup> All in all, total deployed strategic nuclear weapons are expected to decrease from 792 delivery vehicles in 2013 to 720 delivery vehicles by 2018.<sup>133</sup> The aggregate number of nuclear warheads is expected to decline from 1,654 warheads to 1,550 warheads.<sup>134</sup> Despite the optimistic predictions, however, the total number of nuclear arsenals in 2010 was 4,950<sup>135</sup> and currently exists, as of 2014, an estimated number of 4,756 arsenals.<sup>136</sup> Thus, both

---

<sup>126</sup> Hans Kristenson and Robert S. Norris “Global nuclear weapons inventories, 1945–2013,” *Bulletin Of The Atomic Scientists*. 69, no. 5: 2013: 78. Sociological Collection, EBSCOhost.

<sup>127</sup> “United States New START Report,” Nuclear Forces: UNIDIR Project on Transparency and Accountability in Nuclear Disarmament, <http://nuclearforces.org/country-profiles/united-states>.

<sup>128</sup> Tom Z. Collina, Daryl G. Kimball et. al, “U.S. Strategic Nuclear Force Under New START,” Arms Control Association, July 2013, <http://www.armscontrol.org/factsheets/USStratNukeForceNewSTART>.

<sup>129</sup> “United States New START Report,” Nuclear Forces: UNIDIR Project on Transparency and Accountability in Nuclear Disarmament.

<sup>130</sup> Collina, Kimball et. al. “U.S. Strategic Nuclear Force Under New START,” July 2013.

<sup>131</sup> “United States New START Report,” Nuclear Forces: UNIDIR Project on Transparency and Accountability in Nuclear Disarmament,

<sup>132</sup> Collina, Kimball et. al. “U.S. Strategic Nuclear Force Under New START,” July 2013.

<sup>133</sup> Ibid.

<sup>134</sup> Ibid.

<sup>135</sup> Kristenson and Norris, “Global nuclear weapons inventories, 1945–2013,” 78.

<sup>136</sup> “Status of World Nuclear Forces.” *Federation of American Scientists*, <http://fas.org/issues/nuclear-weapons/status-world-nuclear-forces/>.

treaties either decreased nuclear stockpiles or are expected to decrease the quantity of nuclear stockpiles.

On the flip side, while the historic regress of Russian nuclear stockpiles is ‘less well known,’<sup>137</sup> promulgated figures suggest that in 1991, Russian arsenals decreased overall from 30,000 warheads to 4,500 warheads.<sup>138</sup> Between 1991 and 1992, the Russian quantity of strategic warheads deployed with the arsenals also decreased from 9,000 warheads to 1,740 warheads.<sup>139</sup> This is comparable to the United States whose warheads decreased, in 1991, from 10,000 warheads to 1,950 warheads in 1992 deployed with strategic nuclear arsenals.<sup>140</sup> Also in that time, overall Russian nuclear stockpiles decreased from 29,154 arsenals to 26,734 arsenals.<sup>141</sup> The United States dropped from 19,008 arsenals in 1991 to 13,708 arsenals in 1992. For Russia, the inventory of nuclear weapons was 5,215 in 2010,<sup>142</sup> and exists as, by of 2013, 4,480 arsenals.<sup>143</sup> This is compared to the United States who owned 4,950 nuclear weapons in 2010,<sup>144</sup> and currently possesses 4,650 arsenals as of 2013 inventory records.<sup>145</sup>

After signing START I, nuclear arsenals began to decrease. After signing New START, nuclear arsenals – though in smaller numbers – likewise decreased. The overall effects of the treaties are comparable in terms of their actualized consequence.

---

<sup>137</sup> Hans Kristenson, “Trimming Nuclear Excess Options for Further Reductions of U.S. and Russian Nuclear Forces,” *Federation of American Scientists*, no. 5, pp. 10, December 2012, [http://fas.org/\\_docs/2012TrimmingNuclearExcess.pdf](http://fas.org/_docs/2012TrimmingNuclearExcess.pdf).

<sup>138</sup> Ibid.

<sup>139</sup> Ibid.

<sup>140</sup> Ibid.

<sup>141</sup> Kristenson and Norris, “Global nuclear weapons inventories, 1945–2013,” 78.

<sup>142</sup> Ibid.

<sup>143</sup> Ibid.

<sup>144</sup> Ibid.

<sup>145</sup> Ibid.

In spite of these similarities, there are notable differences between START I and New START. First, the two administrations drafted the treaties under differing circumstances – START I at the brink of the U.S.S.R.'s collapse and New START in a post-cold war era. The former knew balance of power strictly in terms of the quantity. Namely, the countries with the most nuclear weapons were most ominous to global stability. The latter understood global balance of power, not exclusively in terms of quantity, but also in terms of *quality* and *intention*. Newly arising rogue nations – namely, Iran and North Korea – who may currently own at least one nuclear weapon, have threatened mass devastation on neighboring countries. Some nuclear countries possess outdated weapons. Thus, even though both START I and New START seek to obtain global balance of power, both treaties were created with different conceptions of *what that balance of power was*. Assessing the extent that both these treaties obtained global balance of power would require different measuring rods to determine the effectiveness of their ideals.

A second difference is how the President and the State Department composed the treaty. In the former, the treaty is very specific – precise – in its regulations. In START I, the treaty specifies notification protocols; geographic regions falling within the range of this treaty; the inability to convert materials into ICBMs, SLBMs or heavy bombers; the inability to resurrect old nuclear weapons; the inability to create new ones etc. In contrast, New START has less of these regulations in both the actual treaty and outside protocol documents. Perhaps this is an issue of differences in historical time periods. Because the U.S. and Russia are not officially in a Cold War any longer, there is less of a need to make specific regulations. Or, since New START is attempting to serve as an update for START I, there was no need to reiterate previously agreed upon points.

Another stark contrast between the two treaties is the response of other countries towards the treaties. After signing START I, further reductions were pursued in the form of the Lisbon Protocol and START II. While the Lisbon Protocol did not encourage further nuclear decrease between Russia and the United States, this still manifested a form of diplomatic communication in resolving nuclear proliferating countries. Likewise, although START II and the Moscow Treaty did not become officially ratified, they demonstrated mutual wills to pursue further nuclear decreasing. In spite of these two disagreements, it would appear that there was a period of relatively stable decline in the nuclear arena. All in all, nuclear activity in the 90's remained relatively low with few disturbances regarding U.S.-Russian relations.

Yet it would appear that New START has not maintained – in consequence and purpose – durable longevity in global balance of power. Growing concerns arise in East Asia. Specifically, China's nuclear upgrading and North Korea's initiatives, have posed threats to East Asian regional stability, leaving neighboring allies insecure and questioning United States assurances.<sup>146</sup> Illusions of stability have been intercepted leaving many dubious. When it comes to the impact of New START – specifically, nuclear reductions – Ralph Cossa and David Santoro wrote in *International Security and Counter Terrorism Reference Center* reports:

Despite the U.S. “pivot strategy” [reduction of nuclear weapons] or rebalancing toward the Asia-Pacific, those Asian allies and partners have questions about the role that the United States intends to play in the region and about how much this role is sustainable over the long term in a fiscally constrained environment. In our discussions with them, many claim to be “reassured but not convinced” by U.S. policy.<sup>147</sup>

But North Korea and China are not the only concerns. The threat of the Iranian nuclear program shades a precarious position in the Middle East. *Foreign Affairs* authors Eric S.

---

<sup>146</sup> Cossa, Ralph, and David Santoro. "Obama's Nuclear Agenda: The Next Four Years," *Pacnet Newsletter* no. 77. November 26, 2012: 1-2, International Security & Counter Terrorism Reference Center, EBSCOhost.

<sup>147</sup> *Ibid*, 2.

Edleman, Andrew Krepinevich Jr and Evan Montgomery noticed the raising hairs of possible Iranian proliferation. This, in the Middle East, could possibly result in a nuclear arms escalation between Iran, Israel and Saudi Arabia.<sup>148</sup>

But remember, the treaty does not specifically address how best to handle these other countries. However, the administration drafted this treaty recognizing these existing problems. The National Review Policy, does address these problems. The NPR outline's the Obama administrations nuclear policy and recognizes the threat of North Korea and Iran.<sup>149</sup> But later, the National Public Review suggests that, given the reductions in nuclear weapons that they wished to pursue at the time, the United States would still have ample abilities to respond as necessary.<sup>150</sup> Yet New START, as a step in the direction of this mentality, has raised questions of security for the U.S.'s allies. It has not quelled them. Even the *Daily Signal* has mentioned that since the signing of the New START treaty, North Korea and Iran have “have been steadily improving their respective ballistic missile capabilities.”<sup>151</sup> This means that New START, though not addressing other countries in text, has failed to produce the results its ideology had promised. However, as will later be addressed, the greatest substantiation to these concerns, has come from none other than Russia herself.

A second growing concern, voiced by NonAlign Movement countries – countries that sided with neither the U.S.S.R. nor the U.S. in the Cold War – is the ability for the U.S. to maintain effect counterbalance against “proliferation terrorism nexus,” especially under

---

<sup>148</sup> Eric S. Edleman, Andrew F. Krepinevich Jr. et. al. “The Dangers of a Nuclear Iran.” *Foreign Affairs*. January, 2011, <http://www.foreignaffairs.com/articles/67162/eric-s-edelman-andrew-f-krepinevich-jr-and-evan-braden-montgomer/the-dangers-of-a-nuclear-iran>.

<sup>149</sup> Department of Defense, “Nuclear Posture Review,” iv.

<sup>150</sup> *Ibid*, 31.

<sup>151</sup> Michaela Dodge, “How the New START Treaty has Strengthened Putin – and Hurt America,” *The Daily Signal*, April 8<sup>th</sup>, 2014, <http://dailysignal.com/2014/04/08/new-start-treaty-strengthened-putin-hurt-america/>.

irritatingly gradual processes that nuclear superpowers have implemented.<sup>152</sup> The primary concern is not the verbal reassurances. It is the militaristic endeavors, or lack thereof. Actions speak louder than words. This is ironic given that the first premise of the 2010 Nuclear Posture Review was to prevent terrorist proliferation.

But foreign nations are not the only ones expressing concern over stability. In the United States, there is fret over the lessening restraint on Russia. The unilateral remarks by Russia, after signing New START, inflicted angst within conservative groups in America. In Russia's eyes, New START "can operate and be viable only if the United States refrains from developing its missile defense capabilities quantitatively or qualitatively."<sup>153</sup> It would appear, in these words, that the United States is handcuffed to Russia's definition of what is "developing... missile defense capabilities quantitatively or qualitatively." Under these remarks, worry grew that New START could surreptitiously, and hypocritically, give a nod to Russian unipolarity (meaning the country that exerts the most political and/or economic power) while binding the United States to a scrupulous razor's edge to uphold the treaties commitments.

This, coupled with Russia's modernizing techniques threatens growing instability. When it comes to modernization, the United States, at the time of the treaty, appeared to be significantly behind. In the words of Frank Gaffney, president of Center for Security Policy, "...the United States has not introduced a new nuclear weapon in over fifteen years. Its missiles, submarines and bombers are, by and large, even older, with some dating back to the 1950s and '60s."<sup>154</sup> In contrast, Gaffney mentions that "Russians are aggressively modernizing their

---

<sup>152</sup> Ibid.

<sup>153</sup> Jim DeMint, "The New START Treaty Weakens U.S. National Security."

<sup>154</sup> Gaffney, Frank Jr., "False START," March 29, 2010.

strategic forces with both new missiles and warheads.”<sup>155</sup> These reduction propositions, he argues, opens subsidies for Russia to further pursue their modernization initiatives.<sup>156</sup>

But these initiatives did not end in 2010. According to Nikolas Gvosdev from *The National Interest*, Russia is outlining plans to transform “old Soviet superpower military machine into a smaller, but more modern, mobile, technologically advanced and capable twenty-first century force.”<sup>157</sup> Their words back their actions. Russia is investing in the largest military renovation in their history.<sup>158</sup> In October 2014, *The Nuclear Threat Initiative* admitted that Russia is pursuing modernization and “recapitalizing its entire arsenal of strategic nuclear weapons and delivery systems.”<sup>159</sup> Even beyond nuclear weapons, Russia seems to persistently revamp their military powers. In 2020, Russia aims to be upgraded in high-tech, active duty equipment, 2,300 tanks, 1200 helicopters and planes.<sup>160</sup> Given the economic conditions of Russia, it seems dubious that they will achieve such optimistic endeavors by 2020. Nevertheless, this has not stopped President Vladimir Putin from actively initiating, spending, pursuing and developing his military advances.

The most recent seriousness of Russia’s military power actualized on November 13<sup>th</sup> 2014, when Russia invaded Ukraine.<sup>161</sup> Russia has not left Ukraine since.<sup>162</sup> As a consequence of

---

<sup>155</sup> Ibid.

<sup>156</sup> Ibid.

<sup>157</sup> Nikolas Gvosdev, “The Bear Awakens: Russia's Military Is Back,” *The National Interest*. November 12, 2014. <http://nationalinterest.org/commentary/russias-military-back-9181>.

<sup>158</sup> Ibid.

<sup>159</sup> “Russia: Overview,” Nuclear Threat Initiative: Building a Safer World, <http://www.nti.org/country-profiles/russia/>.

<sup>160</sup> Nikolas Gvosdev, “The Bear Awakens” November 12, 2014.

<sup>161</sup> “Ukraine Crisis: Russian ‘Cargo-200’ Crossing the Boarder – OSCE.” *BBC News*. November 13, 2014, <http://www.bbc.com/news/world-europe-30039004>.

<sup>162</sup> Laura Smith Smith-Spark and Nic Robertson, “Is Peace Possible in Ukraine? Key Leaders Meet to Find out,” *CNN News*, February 11, 2015, <http://www.cnn.com/2015/02/11/europe/ukraine-conflict/>.

the violence, nearly 1 million Ukrainians have been forced to evacuate.<sup>163</sup> Crimea has also suffered the same fate; as of March 18<sup>th</sup>, 2015, Putin gladly rejoiced in the first anniversary of Russia's reacquisition of Crimea while amassing larger collections of nukes through Ukraine.<sup>164</sup>

As a response to Russia's invasion, president Obama instigated plans to modernize U.S. arsenals.<sup>165</sup> According to William J. Broad and David E. Sanger from the *New York Times*, part of these plans include "...a nationwide wave of atomic revitalization that includes plans for a new generation of weapon carriers."<sup>166</sup> Creating more nuclear arsenals implies an actual *growth* in nuclear stockpile, not decline. Thus, because New START didn't maintain a balance of power between Russia and the United States, the U.S. had to instigate nuclear "rebalance" through increasing and modernizing their stockpiles. Modernization and reform had also violated the quip from Russia about New START only being viable to the extent that "the United States refrains from developing its missile defense capabilities quantitatively or qualitatively." Even on Russia's own definition, was the New START treaty broken.

Although Russia has not formally withdrawn from the treaty, this does beg the question: had New START failed? Even the *New York Times* suggested:

With Russia on the warpath, China pressing its own territorial claims and Pakistan expanding its arsenal, the overall chances for Mr. Obama's legacy of disarmament look increasingly dim... Congress has expressed less interest in atomic reductions than looking tough in Washington's escalating confrontation with Moscow. "The most fundamental game changer is Putin's invasion of Ukraine," said Gary Samore, Mr.

---

<sup>163</sup> Nina Sorokopud, "Ukraine internal displacement nears 1 million as fighting escalates in Donetsk region," *UNHRC: The UN Refugee Agency*, February 6, 2015, <http://www.unhcr.org/54d4a2889.html>.

<sup>164</sup> Don Murray, "Russia's Vladimir Putin Brandashes the Nuclear Option," *CBC News*. March 17, 2015. <http://www.cbc.ca/news/world/russia-s-vladimir-putin-brandishes-the-nuclear-option-1.2997396>.

<sup>165</sup> William J. Broad and David E. Sanger, "U.S. Ramping Up Major Renewal in Nuclear Arms," *New York Times*, Sept. 21, 2014, [http://www.nytimes.com/2014/09/22/us/us-ramping-up-major-renewal-in-nuclear-arms.html?\\_r=0](http://www.nytimes.com/2014/09/22/us/us-ramping-up-major-renewal-in-nuclear-arms.html?_r=0).

<sup>166</sup> *Ibid.*

Obama's top nuclear adviser in his first term and now a scholar at Harvard. "That has made any measure to reduce the stockpile unilaterally politically impossible."<sup>167</sup>

Further regress in nuclear reductions is indicated by the growing cost invested in nuclear weapons. Jon B. Wolfsthal, Jeffrey Lewis and Marc Quint wrote the *The Trillion Dollar Nuclear Triad*, a financial analysis journal. In this, they predicted that the U.S. arsenal spending will cost approximately \$1 trillion in current costs to update the U.S.'s nuclear weapons in a thirty year period.<sup>168</sup> The Congressional Budget Office reported that spending figures for the next 10 years would be "\$355 billion...for strategic and tactical nuclear delivery... DOE's nuclear weapons enterprise and SSBN nuclear reactors... and for nuclear command, control, communications and early warning systems."<sup>169</sup>

New START has caused mild forms of global unrest. Progress towards a nuclear free world, as purposed by Obama's speech in Prague, is not being actualized. Although the text of the treaty permits equal ability to pursue modernization, Russia's independent interpretation – which was left undisputed – has rendered the treaty ineffective. All in all, nuclear reductions in Obama's presidency has not rendered balance of power. While originally both sides reduced their stockpiles, on equal scales, it became only a matter of time before Russia restocked their weapons. To reobtain balance of power required the U.S. to follow suit and thus break the treaty altogether.

The greatest objections to these premises include that, first, correlation does not equal causation. Based on the evidence presented, there is no distinguishable measurement to

---

<sup>167</sup> Ibid.

<sup>168</sup> Jon B. Wolfsthal, Jeffrey Lewis et al. *A Trillion Dollar Nuclear Triad*, James Martin Center for Nonproliferation Studies. Monterey, California, January, 2014, 4, Money Institute of International Studies, [http://cns.miis.edu/opapers/pdfs/140107\\_trillion\\_dollar\\_nuclear\\_triad.pdf](http://cns.miis.edu/opapers/pdfs/140107_trillion_dollar_nuclear_triad.pdf).

<sup>169</sup> "Projected Costs of U.S. Nuclear Forces, 2014 to 2023," *Congressional Budget Office: Nonpartisan Analysis for the U.S. Congress*, Dec. 20, 2013, <http://www.cbo.gov/publication/44968>.

determine if global anxiety and Russia's active modernizations are genuinely the results of New START, the results of START I *with* New START, or all the previous nuclear reduction combined. Second, Russia's interpretation is not equivalent to the actual failing of the treaty itself – thus there is no need to say the treaty itself has failed. Third, Russia's modernization does not imply that there is a lack of nuclear balance of power. Fourth, even if a global free world is not happening at present, that does not mean the U.S. should discontinue pursuing it. Obama's paradigm is therefore correct.

It is true that correlation does not equate with causation. Yet the series of reactions surrounding the events does cause some room for credible speculation. Regional concern has developed when the United States withdrew nuclear support from the Middle East and East Asia. START I did not elicit such fears. And yet New START did. Of course Russia's military buildup cannot be single handedly attributed to New START. Neither can START I garner all 'good things' that happened between Russia and the United States in that time period. New START has not enjoyed such a time period. Weapons and armies are presently modernizing. It is possible that when a global power substantially withdraws its presence, other powers will arise. Russia, in practice, is not demonstrating a mutually shared idea of a nuclear free world that Obama holds. It is important to observe is that, balance of power is not upset because New START has dropped nuclear levels beyond an acceptable, absolute 'number.' In other words, it is not because New START lowered nuclear levels to – say, for example – '10,000 nuclear weapons,' that global balance of power was upset. It is false to think that by dropping nuclear levels below the arbitrary 'line' of 10,000 nuclear weapons, that *that* is what caused New START to fail in holding a global balance of power.

The explanation for New STARTs immediate failure to preserve global balance of power is that times are different. Practically speaking, because there is more instability in the world, and because Russia is not demonstrating a willingness to truly negotiate nuclear reductions, New START couldn't succeed. Nuclear reduction today does not guarantee success for tomorrow.

Secondly, to say that New START has failed is not synonymous to saying that the text of the treaty was insufficient. To determine the effectiveness of the treaty would encompass the treaty, its interpretations, and practices. Therefore interpretation matters. As mentioned above, Russia has asserted that the United States cannot develop their missile defense. This upholds that New START is valid insofar as the United States does develop their missiles. But this fulfills only half of the treaties commitments. On this interpretation, Russia could develop their missile weaponry and New START would still be valid.

While Russia failed to remark about *their* obligation to the treaty, this comment does not necessarily criticize the actual document. Yet, this would suggest that the ideology surrounding New START – a nuclear free world – has not been succeeding. If a nation state isn't respecting nuclear reductions within the treaty, it seems unlikely The world has stepped further away from being nuclear free, not closer to it. New START, in its nuclear free principles and its textual mandates for reduction, has failed. Global balance of power was not reached under New START's influence.

Although Russia reinterpreted the document from its original, textual content, the most this assertion reveals is Russia's intent for the U.S. not to bolster their missile strength. It is possible, however, that this was hinting at an indefinite loophole that while the U.S. should not infringe on Russia's nuclear capacities, they could make no such reciprocal promise for the

United States or other countries. There is more to be observed for the success of the treaty than its actual text. Intentions and interpretations matter. Of which, it is no surprise that Russia's actions have pushed Obama to modernize and restock nuclear arsenals.

Third, Russia's pursuit of military revitalization should imply an inequality with a global balance of power. While this may not imply geographic expansion or territorial acquisitions, this creates an increase in power geared for Russia. While quantitatively, Russia and the United States have reduced arms to a relatively equal scale, qualitatively, Putin's lavish innovations – while allowed within the confines of the treaty – have resulted in a two-fold effect. First, it significantly increases Russia's unipolarity. This means that in the midst of the United States disarming, Russia has been rearming. Second, Russia's obsession with upgrading has, in turn, caused the United States to increase the number of weapon delivery vehicles. This sequence is consistent with a mentality that power was not in balance, and adjusting measures had to compensate for that imbalance. New START, in providing modernization allowances, has prevented further nuclear reductions at the moment.

Dealing with the fourth objection is difficult. Many scholars contend for a nuclear free world. George P. Shultz, former “secretary of state from 1982 to 1989,” William J. Perry, “secretary of defense from 1994 to 1997,” Henry A. Kissinger, “secretary of state from 1973 to 1977” and Sam Nunn, ‘former chairman of the Senate Armed Services Committee,’<sup>170</sup> have all condoned this view. In their “A World Free of Nuclear Weapons,” they outline a possible nuclear plan for the United States. After offering a strategic policy to endorse a nuclear free world, they concluded in stating “We endorse setting the goal of a world free of nuclear weapons and working energetically on the actions required to achieve that goal, beginning with the

---

<sup>170</sup> George P. Schultz, William J. Perry, et. al, “A World Free of Nuclear Weapons,” 2007.

measures outlined above.”<sup>171</sup> The former Secretary of States and Senate Armed Services Committee assent to total nuclear reduction.

*Getting to Zero: The Path to Nuclear Disarmament* compiled much research and analysis to offer a proposal to reach nuclear zero domains. Professor Catherine McArdle Kelleher, professor in School of Public Policy and advisor of “international security and American defense policy,”<sup>172</sup> and Professor Emerita Judith Reppy, professor at Cornell University who ‘research[es] in the area of military technology and related issues,’<sup>173</sup> detail specific advances for Obama to enact towards that ideal. Their final analysis asserts that:

...[M]utual deterrence need not exist at all in relations between two nuclear states. There is no deterrence if neither side contemplates attacking or being attacked. This means that further reductions in U.S. and Russian nuclear forces should be possible as long as the political relationship develops to the point where fears and suspicions diminish. Indeed...deterrence can operate even when there are no nuclear weapons in the world. That is because we would be entering a post–nuclear weapons world in which the knowledge of how to make nuclear weapons would continue to exist, as well as fissile materials and the industrial technologies for producing them.<sup>174</sup>

More books have been written on this subject matter. In regards to this objection, a couple points should be considered.

The objective and purpose of nuclear reductions must be contended. There are four criteria that should dictate nuclear weapon decision making. First, nuclear reductions should strive for the objective ideal. Admittedly, a nuclear-free world would be better than one with

---

<sup>171</sup> Ibid.

<sup>172</sup> “Catherine Kelleher,” University of Maryland School of Public Policy.  
<https://www.publicpolicy.umd.edu/faculty/catherine-kelleher>.

<sup>173</sup> “Research Institutes,” *Cornell University: Department of Science and Technology Studies*,  
<http://sts.cornell.edu/people/jvr2.cfm>.

<sup>174</sup> Catherine McArdle and Judith Reppy, *Getting to Zero: The Path to nuclear Disarmament*, 2011, Stanford University Press, 2011, p. 352, <https://www.questia.com/library/120075231/getting-to-zero-the-path-to-nuclear-disarmament>. Questia.

nuclear weapons. It would be wonder if conflict could be solved without weapons that didn't involve the possibility of mass devastation against humanity. It would be great if such weapons of mass destruction – the possibility that millions of people could be murdered in one instance – didn't exist. This is what New START seeks to obtain.

The second criterion, however for nuclear policy should be that conflict of some form, at some time in history between two or more peoples, countries or ethnicities, is inevitable. Prior to nuclear weapons, nations warred. Resources, political and ideological contingencies still elicited national and international conflicts. While not all wars and conflicts are or have been equally proportionate in terms of physical cost, time, or effort, the point remains. Conflict with other nations is inevitable – this is true both with and without nuclear weapons. Since escalation has been empirically verified in global history, it is possible for conflict to rise to a level where nuclear weapons are imperative to remain equally competitive with those who threaten peace. Politics should anticipate the nature of international conflict as – on some level – unavoidable, while conflict necessitating nuclear development is, at minimum, a possibility.

This relates to the third criterion, which is in instances where countries do demonstrate mutual consent for processes to peace, it is better to remain equally competent than behind those countries to avoid subversion. This is naturally compatible with the notion of self-preservation. This means that relying on secondary, missile defense systems for protection, in instances where a non-peaceful state is advancing in nuclear development, is not a wise choice. New START encourages this reliance on inferior missile systems.

The fourth criterion for nuclear weapon policy summarizes the previous three points. Policy must maintain a solution which is reconcilable to present day circumstances. This means

the ideal at the given time may capitulate to the reality of history and the present to dictate the future.

That being said, the ideal minimum in nuclear policy must sometimes be redefined. A common misunderstanding in nuclear policy is to assume sheer quantity is the measure of progress or regress for success in nuclear policy. To assume there is an absolute, finite number of nuclear weapons that cannot be reduced without bringing conflict is to ask the wrong question about nuclear policy. The question is not “how many nuclear weapons can a nuclear superpower reduce before insecurity arises?” The question that should govern nuclear policy is “what is the appropriate level of nuclear weapons – in quantity and quality – to preserve global peace and stability in the given situation?” In instances of growing insecurity and unrest, the minimum level may sometimes encourage rearming and rebuilding. Thus, if some form conflict *is* inevitable, if it is better to remain equally competent to those threatening balance of power, and if policy must reconcile these two realities, then it is possible to infer that there will never come a time where nuclear weapons will be completely and permanently obviated.

Nuclear reduction treaties can be successful insofar as they truly bring peace. Peace can only be garnered when both sides agree to complete and total equality of power. When it comes to a two party treaty regarding nuclear weapons, long term negotiations will subside if one side has no issue with possessing – or even seeking to possess – absolute power, disturbing peace. If nuclear weapons are completely retired, it will only be a matter of time before they or some other equivalent weapon will be resurrected.

Global balance of power cannot be accomplished through eliminating nuclear weapons. That is because ability to reach that point interminably is not possible given present day realities.

But this doesn't mean that there can't be a time when more reductions can be pursued. However, with the constant worries threatening peace in the present, this doesn't seem to be an actuality in the foreseeable future.

Even Michael O'Hanlon, specialist in national security and defense policy,<sup>175</sup> poses questions to be considered in nuclear reductions. He even implies that should reductions be handled incorrectly "it could make countries that depend on America's military decide they should seek nuclear weapons of their own."<sup>176</sup> Although he advocates a gradual process of reduction, he still admits potential risk if processes are handled incorrectly.

As a result of the problems associated with a nuclear zero policy, the following suggestions could be considered

First, the United States should not permit Russia to hold nuclear advantage in the world. According to *BBC News*, Russia has overtly stated their intentions to reacquire Soviet territory. Putin was quoted as mentioning that "[Russia] has always had and still has legitimate zones of interest ... We should not drop our guard in this respect, neither should we allow our opinion to be ignored..." [Putin's]... foreign policy was to regain Russia's place in world affairs."<sup>177</sup> For the sake of global stability in Eastern Europe, and extending to regions in the Middle East and East Asia, the U.S. with NATO forces and regional allies should continue to approve modernization programs. While Obama's current nuclear upgrades are incongruent with New START, it is the appropriate response to Russia's actions. This would be an immediate action to pursue.

---

<sup>175</sup> "Michael E. O'Hanlon," *Brookings*, <http://www.brookings.edu/experts/ohanlonm>.

<sup>176</sup> Michael E. O'Hanlon, "Is a World without Nuclear Weapons Really Possible?" *Brookings*, May 4, 2010, <http://www.brookings.edu/research/opinions/2010/05/04-global-zero-ohanlon>.

<sup>177</sup> "Vladimir Putin: The rebuilding of 'Soviet' Russia," *BBC News*, March 27<sup>th</sup>, 2014, <http://www.bbc.com/news/magazine-26769481>.

Of a long term importance would be reducing fundamental assets that neither START I nor New START addressed. Nonstrategic weapons, i.e. Tactical Nuclear Weapons (TNWs), should be reduced. If ever there was an imbalance in the nuclear field, this would be it. According to Daryl Kimball, Executive Director of Arms Control Association, estimated figures suggest that Russia possesses approximately 2,000 TNWs while the United States currently owns 500 TNWs.<sup>178</sup> Kimball also suggest that while NATO classifies their TNW figures, approximately 150-200 gravity bombs (a form of TNWs) are shared in Europe through the United States.<sup>179</sup> Given this striking advantage, it is unlikely that Russia would quickly equalize those figures.

It is also unlikely that correcting this imbalance, at present, would resolve any diplomatic contingencies between Russia-U.S. relations; that is, not without implicating escalations which would further endanger Europe, East Asia or the Middle East. A more probable scenario of reducing TNW's would involve a trade-off including outside, strategic weapons of interest or geographical positioning in which the United States holds an explicit advantage. The same guidelines suggested for strategic nuclear weapons should also be applicable to nonstrategic nuclear weapons. Only when a time is conditioned for nuclear reductions should trade-off be pursued. And yet, just as is true of strategic nuclear weapons, nonstrategic weapons may not be fully and completely absolved from the world. While the goal is never to increase nuclear weapons, government must recognize when reduction is not possible, and when enhancements and re-stocking are necessary.

---

<sup>178</sup> Daryl Kimball, "Nuclear Weapons: Who has What at a Glance," Arms Control Association, Upt: February, 2015 <http://www.armscontrol.org/factsheets/Nuclearweaponswhohaswhat>.

<sup>179</sup> Oliver Meier and Simon Lunn, "Trapped: NATO, Russia, and the Problem of Tactical Nuclear Weapons," Arms Control Association, January 9, 2014, [http://www.armscontrol.org/act/2014\\_01-02/Trapped-NATO-Russia-and-the-Problem-of-Tactical-Nuclear-Weapons](http://www.armscontrol.org/act/2014_01-02/Trapped-NATO-Russia-and-the-Problem-of-Tactical-Nuclear-Weapons).

## Section V: Conclusion

START I maintained a consistent balance of power in treaty and in practice enhancing overall, global stability. Reagan outlined his ideals in his Address at Commencement Exercise. His concept of nuclear reduction was actualized by START where his desire was two-fold. First, Reagan sought a quantitative reduction in nuclear weapons; second, he desired to implement a nuclear ceiling, terminating further increasing levels. These ideals were manifested in President George H.W. Bush's signing of START I. These plans were outlined while opposing any forms of modernization, resurrection, remaking or creating new forms nuclear weapons. Nuclear reductions happened. There was a substantial decrease in nuclear stockpiles in both countries. Their commitments to the treaty were actualized and U.S.-Russian relations enjoyed a time of relative stability and peace.

The Reagan and Bush administration was a time where balance of power was categorized by two characteristics. First, global balance of power, from a nuclear stance was rested exclusively between Russia and the United States. Rogue nations had either not fully proliferated or had not developed to a point to pose threats to regional or global stability. Second, global balance of power could only be measured by a quantitative standpoint. This is because START I did not permit transformation of current nuclear weapons, resurrecting or creating new nuclear weapons. It appears that both countries adhered to this principle; there were no nuclear contingencies, revamps or restocking in this time period. From these two evaluations, it is apparent that START I maintained consistency in treaty and in practice causing greater reductions and better stability for both countries. Although nuclear weapons still prove diplomatically frustrating, because of these significant reductions, they are slightly less pressing and the brink of an all-out Russian-American nuclear war seems even more distant.

New START did not obtain its ideals to the fullest extent. President Obama seeks to fully eradicate nuclear weapons as he declared in Prague. The Nuclear Posture Review outlined his administration's vision to reduce nuclear weapons while preserving allied forces and maintaining regional security. New START actualized this vision by mandating further nuclear reductions, but allowed the possibility of modernization and did not address Russia's unilateral interpretations. Russia is currently modernizing their nuclear program. They have recently invaded both Crimea and Ukraine and remain there to this day. Russia's advancements have disturbed the balance of power and devaluated New START. As a result, the United States is now revitalizing their nuclear programs.

This is happening under a time where balance of power is characterized differently than the conditions of START I. Whereas Reagan and Bush were largely concerned with numerical differences, Obama faced the challenge of modernization. That is a provision that was permitted in New START. Second, balance of power is more easily disturbed because of new, nuclear possessing countries including Iran and North Korea. This has caused further tensions and strains between U.S.-Russian relations and U.S. allies. Finally, New START was not consistently preserved because of the modernization programs initiated by Russia combined with their invasion of Ukraine which has resulted in the United States revitalizing and restocking their nuclear arsenals.

Nuclear policy must be compatible with reality and ideals. If there is ever a time where actions must be taken to preserve the frail state of stability, it is the present. If the condition of man is truly one that will perpetuate conflict in the midst of progressing societies, the future of completely absolving nuclear weapons remains grim. What should be achieved is what can be observed: a safer world, peace, balance of power, stability etc. But obtaining these ends may

sometimes impel necessary evils. Nuclear weapons can never be fully and permanently eradicated. Should a time arise when full reduction is achieved, the United States would do well to remember that the world never has, nor ever will, hold the exact same values to the same degree at the same time in history. If a country has a potential to ‘cheat’ the world of peace for their own expediency, that country will do so. Nuclear policy should correspond and prepare for this mentality.

In observing present realities between Russia and the United States, (insofar as observing strategic nuclear weapons) it would appear that there currently *is* a relative balance of power between the two countries. While historically this was accomplished by nuclear reductions found in START I, New START did not achieve the same end. Balance of power was, in a modest sense only when President Barak Obama, correctly, identified the response to Russia’s invasion through nuclear renewals. was that balance, in a modest sense, achieved. While present situation in Ukraine has yet to be fully resolved, the United States can – slowly but surely – take steps in the right direction to help maintain global order.

## Bibliography:

- “Agreed Statements of Annex.” Arms Control Association. January 7, 1991.  
<http://www.armscontrol.org/node/2493>, [accessed January 8, 2015].
- “Annex on Notifications.” U.S. Department of State. April 8, 2010.  
<http://www.state.gov/t/avc/newstart/c44126.htm>, [accessed January 8, 2015].
- “Annex on Inspection Activities.” U.S. Department of State. April 8, 2010.  
<http://www.state.gov/t/avc/newstart/c44126.htm>, [accessed January 8, 2015].
- “Annex on Telemetric Information.” U.S. Department of State April. 8, 2010.  
<http://www.state.gov/t/avc/newstart/c44126.htm>, [accessed January 8, 2015].
- “Annexes to Inspection Protocol.” Arms Control Association. July 31, 1991.  
<http://www.armscontrol.org/node/2493>, [accessed January 8, 2015].
- Antonov, Anatoly. "Further Nuclear Arms Limitations: Factors and Prospects." *Security Index: A Russian Journal On International Security* 19, no. 2: 2013: 13-22. *International Security & Counter Terrorism Reference Center*. EBSCOhost, [accessed January 9, 2015].
- “Associate Documents.” Arms Control Association. July 31, 1991.  
<http://www.armscontrol.org/node/2493>, [accessed January 8, 2015].
- Barak Obama. Proclamation. “Remarks by President Obama and President Medvedev of Russia at New START Treaty Signing Ceremony and Press Conference.” The White House. April 8, 2010. <http://www.whitehouse.gov/the-press-office/remarks-president-obama-and-president-medvedev-russia-new-start-treaty-signing-cere>, [accessed: January 8, 2015].
- \_\_\_\_\_. “Remarks by President Barak Obama.” Hradcany Square, Prague, Czech Republic. The White House: Office of the Press Secretary. April 5, 2010. [http://www.whitehouse.gov/the\\_press\\_office/Remarks-By-President-Barack-Obama-In-Prague-As-Delivered](http://www.whitehouse.gov/the_press_office/Remarks-By-President-Barack-Obama-In-Prague-As-Delivered) [accessed: March 10, 2015].
- Broad, William J. and David E. Sanger. “U.S. Ramping Up Major Renewal in Nuclear Arms.” *New York Times*. Sept. 21, 2014.  
[http://www.nytimes.com/2014/09/22/us/us-ramping-up-major-renewal-in-nuclear-arms.html?\\_r=0](http://www.nytimes.com/2014/09/22/us/us-ramping-up-major-renewal-in-nuclear-arms.html?_r=0). [accessed: March 19, 2015].
- Bureau of Verification, Compliance and Implementation. “Comparison of START Treaty, Moscow Treaty, and New START Treaty.” U.S. Department of

- State. April 8, 2010. <http://www.state.gov/t/avc/rls/139901.htm> [accessed: March 11, 2015].
- “Catherine Kelleher.” University of Maryland School of Public Policy. <https://www.publicpolicy.umd.edu/faculty/catherine-kelleher> [Accessed: March 13, 2015].
- Central Intelligence Agency. Proclamation. “Soviet Tactical Nuclear Forces and Gorbachev Nuclear Pledges: Impact, Motivations and Next Steps.” 1989. *Making the History of 1989*. Item #130. <http://chnm.gmu.edu/1989/items/show/130>, [accessed January 08 2015].
- Chilton, Gen. Kevin P. “Senate Armed Services Subcommittee - Hearing On New START Implementation.” *U.S. Strategic Command*. July 20<sup>th</sup>, 2010. [http://www.stratcom.mil/speeches/2010/43/Senate\\_Armed\\_Services\\_Subcommittee\\_-\\_Hearing\\_On\\_New\\_START\\_Implementation/](http://www.stratcom.mil/speeches/2010/43/Senate_Armed_Services_Subcommittee_-_Hearing_On_New_START_Implementation/) [accessed: March 10, 2015].
- Collina, Tom Z., Daryl G. Kimball et. al. “The Case for New Strategic Arms Reduction.” An Arms Control Association Brief. December 2010. [http://www.armscontrol.org/system/files/NewSTART\\_Report\\_FINAL\\_No\\_v\\_30.pdf](http://www.armscontrol.org/system/files/NewSTART_Report_FINAL_No_v_30.pdf) [accessed: March 11, 2015].
- \_\_\_\_\_. “U.S. Strategic Nuclear Force Under New START.” Arms Control Association. July 2013. <http://www.armscontrol.org/factsheets/USStratNukeForceNewSTART> [Accessed: March 12, 2015].
- “Comprehensive Nuclear Test Ban Treaty.” Nuclear Threat Initiative: Building a Safer World. <http://www.nti.org/treaties-and-regimes/comprehensive-nuclear-test-ban-treaty-ctbt/> [Accessed: April 19, 2015].
- “Conversion or Elimination Protocol.” Arms Control Association. July 31, 1991. <http://www.armscontrol.org/node/2493>, [accessed January 8, 2015].
- Cossa, Ralph, and David Santoro. "Obama's Nuclear Agenda: The Next Four Years." Pacnet Newsletter no. 77. November 26, 2012: 1-2. *International Security & Counter Terrorism Reference Center, EBSCOhost* [accessed January 9, 2015].
- “Definition of Annex.” Arms Control Association. July 31, 1991. <http://www.armscontrol.org/node/2493>, [accessed January 8, 2015].

- de Koning, Philippe, and Zhao Tong. "The United States, China, and Nuclear Arms Control: Time for a Creative Spark. (cover story)." *Pacnet Newsletter* no. 63 (August 8, 2013): 1-2. *International Security & Counter Terrorism Reference Center*. EBSCOhost [accessed January 9, 2015].
- DeMint, Jim. "Jim DeMint: The New START Treaty Weakens U.S. National Security." *U.S. News.com*. August 16, 2010.  
<http://www.usnews.com/opinion/articles/2010/08/16/jim-demint-the-new-start-treaty-weakens-us-national-security> [Accessed March 12, 2015].
- Department of Defense. "Nuclear Posture Review Report." April 2010.  
<http://www.defense.gov/npr/docs/2010%20Nuclear%20Posture%20Review%20Report.pdf> [Accessed: March 10, 2015].
- Dodge, Michaela. "How the New START Treaty has Strengthened Putin – and Hurt America." *The Daily Signal*. April 8<sup>th</sup>, 2014.  
<http://dailysignal.com/2014/04/08/new-start-treaty-strengthened-putin-hurt-america/> [Accessed: April 2<sup>nd</sup>, 2015].
- D'Souza, Dinesh. "President Reagan, Winning the Cold War." quoted in "Ronald Reagan: Facts, Information, Articles about Ronald Reagan, the 40<sup>th</sup> U.S. President." Historynet. <http://www.historynet.com/ronald-reagan> [accessed: March 9<sup>th</sup>, 2015].
- Edleman, Eric S., Andrew F. Krepinevich Jr., et. al. "The Dangers of a Nuclear Iran." *Foreign Affairs*. January, 2011.  
<http://www.foreignaffairs.com/articles/67162/eric-s-edelman-andrew-f-krepinevich-jr-and-evan-braden-montgomer/the-dangers-of-a-nuclear-iran> [accessed: March 17, 2015].
- FindLaw UK. "What is Meant by International Waters and Airspace?" Thomas Rueters.  
[http://www.findlaw.co.uk/law/government/other\\_law\\_and\\_government\\_pics/500439.html](http://www.findlaw.co.uk/law/government/other_law_and_government_pics/500439.html) [accessed: March 10, 2015].
- Freedman, Lawrence. "Disarmament and Other Nuclear Norms." *Washington Quarterly* 36, no. 2: 2013: 93-108. Political Science Complete, EBSCOhost [accessed January 9, 2015].
- Gaffney, Frank Jr. "False START." *Center for Security Policy*. March 29, 2010.  
<http://www.centerforsecuritypolicy.org/2010/03/29/false-start-2/> [Accessed: March 12, 2015].

- Gates, Robert. "Carnegie Endowment for International Peace (Washington, D.C.)." U.S. Department of Defense. October 28, 2008. <http://www.defense.gov/speeches/speech.aspx?speechid=1305> [accessed March 10, 2015].
- \_\_\_\_\_. "The Case for a New START Treaty." *U.S. Strategic Command*. May 13, 2010. [http://www.stratcom.mil/news/2010/159/The\\_Case\\_for\\_the\\_New\\_START\\_Treaty/](http://www.stratcom.mil/news/2010/159/The_Case_for_the_New_START_Treaty/) [accessed: March 10, 2015].
- George H.W. Bush, Proclamation. "President-Elect Bush Informs Mikhail Gorbachev of His Need for Time to Formulate New Policies." *Making the History of 1989*. Item #140. <http://chnm.gmu.edu/1989/items/show/140> [accessed March 10, 2015].
- Gvosdev, Nikolas K. "The Bear Awakens: Russia's Military Is Back." *The National Interest*. November 12, 2014. <http://nationalinterest.org/commentary/russias-military-back-9181> [Accessed: March 12, 2015].
- Hoar, William P. "A Bad START and Other Perilous Nuclear Posuring." *The New American*. Vol 26 No. 11, May 24, 2010. <https://www.questia.com/article/1G1-227974207/a-bad-start-and-other-perilous-nuclear-posturing>. Questia. [accessed January 9, 2015].
- Hoekstra, Douglas J. "Presidential Beliefs and the Reagan Paradox." *Presidential Studies Quarterly*, no. 3 (1997). 27. <http://www.questia.com/read/1G1-20084319/presidential-beliefs-and-the-reagan-paradox>.
- "Inspection Protocol." Arms Control Association. July 31, 1991. <http://www.armscontrol.org/node/2493>. [accessed January 8, 2015].
- "JCIC Documents." Arms Control Association. July 31, 1991. <http://www.armscontrol.org/node/2493>. [accessed January 8, 2015].
- "Joint Compliance and Inspection Commission Protocol." Arms Control Association. July 31, 1991. <http://www.armscontrol.org/node/2493>, [accessed January 8, 2015].
- Kassenova, Togzhan. "The Struggle for a Nuclear Free Zone in Central Asia." *Bulletin of Atomic Scientists*. December 22, 2008. <http://thebulletin.org/struggle-nuclear-weapon-free-zone-central-asia> [accessed March 10, 2015].
- Kazin, Michael, Rebecca Edwards et. al. *The Princeton Encyclopedia of American Political History Volume II*. Princeton University Press. 2010.

- <https://www.questia.com/library/120075243/the-princeton-encyclopedia-of-american-political-history>. Questia, [accessed: January 9, 2015].
- Kelleher, Catherine McArdle, Judith Reppy. *Getting to Zero: The Path to Nuclear Disarmament*. Stanford University Press, 2011. <https://www.questia.com/library/120075231/getting-to-zero-the-path-to-nuclear-disarmament>. Questia. [accessed January 9, 2015].
- Kemp, Jack. "Reykjavik Summit: Realism or Détente?." Washington D.C. Jack Kemp Foundation. October 8, 1986.  
<http://library.jackkempfoundation.org/files/0/MC4yNDgxODIwMCAxMzgxNTAwMjA2.pdf> [accessed: March 9, 2015].
- Kimball, Daryl. "Nuclear Weapons: Who has What at a Glance." Arms Control Association. Upt: February, 2015.  
<http://www.armscontrol.org/factsheets/Nuclearweaponswhohaswhat> [Accessed March 13, 2015].
- Kristensen, Hans M. and Robert S. Norris. "Global nuclear weapons inventories, 1945–2013." *Bulletin Of The Atomic Scientists*. 69, no. 5: 2013: 75-81. Sociological Collection, EBSCOhost [accessed March 12, 2015].
- \_\_\_\_\_. "Russian nuclear forces, 2014." *Bulletin Of The Atomic Scientists* 70, no. 2: 2014: 75-85. Sociological Collection, EBSCOhost [accessed January 9, 2015].
- \_\_\_\_\_. "Trimming Nuclear Excess Options for Further Reductions of U.S. and Russian Nuclear Forces." *Federation of American Scientists*. no. 5. December 2012. [http://fas.org/\\_docs/2012TrimmingNuclearExcess.pdf](http://fas.org/_docs/2012TrimmingNuclearExcess.pdf) [Accessed: March 16, 2015].
- \_\_\_\_\_. "US nuclear forces, 2014." *Bulletin Of The Atomic Scientists* 70, no. 1: 2014: 85-93. Sociological Collection, EBSCOhost [accessed January 9, 2015].
- LeMouse, Mack. "Brief History of Nuclear Weapons." Health Guidance.  
<http://www.healthguidance.org/entry/13709/1/Brief-History-of-Nuclear-Weapons.html> [accessed March 9, 2015].
- Legvold, Robert. "Managing the New Cold War." *Foreign Affairs* 93, no. 4: 2014: 74-84. Political Science Complete, EBSCOhost [accessed January 9, 2015].
- "Lisbon Protocol." Arms Control Association. July 31, 1991.  
<http://www.armscontrol.org/node/2493>, [accessed January 8, 2015].
- McArdle, Catherine and Judith Reppy. *Getting to Zero: The Path to Nuclear Disarmament*. Stanford CA: Stanford University Press. 2011.

- <https://www.questia.com/library/120075231/getting-to-zero-the-path-to-nuclear-disarmament>. Questia. [Accessed: March 13, 2015].
- Meier, Oliver and Simon Lunn. "Trapped: NATO, Russia, and the Problem of Tactical Nuclear Weapons." Arms Control Association. January 9, 2014. [http://www.armscontrol.org/act/2014\\_01-02/Trapped-NATO-Russia-and-the-Problem-of-Tactical-Nuclear-Weapons](http://www.armscontrol.org/act/2014_01-02/Trapped-NATO-Russia-and-the-Problem-of-Tactical-Nuclear-Weapons) [Accessed: March 13, 2015].
- "Memorandum of Understanding Protocol." Arms Control Association. July 31, 1991. <http://www.armscontrol.org/node/2493>, [accessed January 8, 2015].
- "Michael E. O'Hanlon." Brookings. <http://www.brookings.edu/experts/ohanlonm> [Accessed: March 13, 2015].
- "Milestones: 1969-1976: Strategic Arms Limitation Talks/Treaty (SALT) I and II." U.S. Department of State: Office of the Historian. <https://history.state.gov/milestones/1969-1976/salt> [accessed March 9, 2015].
- Murray, Don. "Russia's Vladimir Putin Brandishes the Nuclear Option." *CBC News*. March 17, 2015. <http://www.cbc.ca/news/world/russia-s-vladimir-putin-brandishes-the-nuclear-option-1.2997396> [Accessed: March 19, 2015].
- "New Strategic Arms Reduction Treaty (New START)." U.S. Department of State. April 8, 2010. <http://www.state.gov/t/avc/newstart/c44126.htm>, [accessed January 8, 2015].
- "Notification Protocol." Arms Control Association. July 31, 1991. <http://www.armscontrol.org/node/2493> [accessed January 8, 2015].
- "Nuclear Chronology." Office of the Under Secretary of Defense for Acquisition, Technology and Logistics. 2011. <http://www.acq.osd.mil/ncbdp/nm/images/NuclearChronology.pdf> [accessed: March 10, 2015].
- "New START." U.S. Department of State: Diplomacy in Action. <http://www.state.gov/t/avc/newstart/index.htm> [accessed: March 11, 2015].
- Norris, Robert S. and Hans M. Kristensen. "Global Nuclear Weapon Inventories: 1945-2010." *Bulletin of the Atomic Scientists*. July/August 2010. vol. 66, no. 4, pp. 77–83. <http://bos.sagepub.com/content/66/4/77.full.pdf+html> [accessed: March 10, 2015].

“Notification Protocol.” Arms Control Association. July 31, 1991.  
<http://www.armscontrol.org/node/2493> [accessed January 8, 2015].

O’Hanlon, Michael E. “Is a World without Nuclear Weapons Really Possible?”  
*Brookings*. May 4, 2010.  
<http://www.brookings.edu/research/opinions/2010/05/04-global-zero-ohanlon> [Accessed: March 13, 2015].

Paulson, Heidi. “Towards a New ‘New Nuclear Triad.’” Maxwell Airforce Base.  
April, 2011.  
[http://www.researchgate.net/publication/235140499\\_Toward\\_a\\_New\\_New\\_Triad](http://www.researchgate.net/publication/235140499_Toward_a_New_New_Triad). [accessed March 16, 2015].

“Projected Costs of U.S. Nuclear Forces, 2014 to 2023.” *Congressional Budget Office: Nonpartisan Analysis for the U.S. Congress*. Dec. 20, 2013.  
<http://www.cbo.gov/publication/44968> [accessed: March 13, 2015].

“Protocol to the New Strategic Arms Reduction Treaty (New START).” U.S. Department of State. April 8, 2010. <http://www.state.gov/t/avc/newstart/c44126.htm>, [accessed January 8, 2015].

“Protocol to the Treaty Between the United States of America and the Union of the Soviet Socialist Republic on the Reduction and Limitations of Strategic Offensive Arms.” Arms Control Association. July 31, 1991.  
<http://www.state.gov/www/global/arms/starthtm/start/lisbon.html#lisbonPROTOCOL> [accessed January 8, 2015].

Ronald Reagan. “Address at Commencement Exercises at Eureka College, Eureka, Illinois.” March 9, 1982.  
<http://www.reagan.utexas.edu/archives/speeches/1982/50982a.htm> [accessed: March 9<sup>th</sup>, 2015].

\_\_\_\_\_. Proclamation. “Address to the American and Soviet Peoples on the Soviet-United States Summit Meeting.” *Making the History of 1989*. Item #57. December 8, 1987.  
<http://chnm.gmu.edu/1989/items/show/57>, [accessed: January 8, 2015].

“Research Institutes.” Cornell University: Department of Science and Technology Studies. <http://sts.cornell.edu/people/jvr2.cfm> [Accessed March 13, 2015].

Rosenburg, Jennifer. “The Atomic Bombing of Hiroshima and Nagasaki.” About Education.  
[http://history1900s.about.com/od/worldwarii/a/hiroshima\\_2.htm](http://history1900s.about.com/od/worldwarii/a/hiroshima_2.htm) [accessed March 9, 2015].

- “Russia: Overview.” Nuclear Threat Initiative: Building a Safer World.  
<http://www.nti.org/country-profiles/russia/>. [Accessed: March 12, 2015].
- “Salt I and II.” The Cold War Museum. <http://www.coldwar.org/articles/70s/SALTlandII.asp>.
- Schofield, Julian. “Arm Control and the Failure of Power Balance.” *Canadian Journal of Political Science*. Vol. 33 No. 4. February 15, 2005.  
<http://journals.cambridge.org/action/displayFulltext?type=1&fid=279263&jid=CJP&volumeId=33&issueId=04&aid=279262&bodyId=&membershipNumber=&societyETOCSession=>. Cambridge University Press. [Accessed: March 16, 2015].
- Schultz, George P., William J. Perry, et. al. “A World Free of Nuclear Weapons.”  
*The Wall Street Journal*. January 4, 2007.  
<http://www.wsj.com/articles/SB116787515251566636>, [accessed January 9, 2015].
- Smith-Spark, Laura and Nic Robertson. “Is Peace Possible in Ukraine? Key Leaders Meet to Find out” *CNN News*. February 11, 2015.  
<http://www.cnn.com/2015/02/11/europe/ukraine-conflict/> [Accessed: March 13, 2015].
- Soderberg, Nancy, and Ryan Costello. "President Obama's Nuclear Legacy." *American Foreign Policy Interests* 34, no. 3: 2012: 111-124. *Political Science Complete*, EBSCOhost [accessed January 9, 2015].
- Sorokopud, Nina. “Ukraine internal displacement nears 1 million as fighting escalates in Donetsk region.” UNHRC: The UN Refugee Agency. February 6, 2015. <http://www.unhcr.org/54d4a2889.html> [Accessed March 13, 2015].
- “Status of World Nuclear Forces.” Federation of American Scientists.  
<http://fas.org/issues/nuclear-weapons/status-world-nuclear-forces/>  
 [Accessed: March 12, 2015].
- “Strategic Arms Reduction Treaty (START I).” The Reagan Vision for a Nuclear Free World. <http://www.thereaganvision.org/strategic-arms-reduction-treaty-start-1/> [accessed: March 9, 2015].
- “Table of U.S. ICBM Forces.” Archive of Nuclear Data. Natural Resources Defense Counsel. <http://www.nrdc.org/nuclear/nudb/datab3.asp> [accessed: March 12, 2015].

- “Telemetry Protocol.” Arms Control Association. July 31, 1991.  
<http://www.armscontrol.org/node/2493>, [accessed January 8, 2015].
- “The START I Treaty Text.” Arms Control Association. July 31, 1991.  
<http://www.armscontrol.org/node/2493> [accessed January 8, 2015].
- “Throw-Weight Protocol.” Arms Control Association. July 31, 1991.  
<http://www.armscontrol.org/node/2493>, [accessed January 8, 2015].
- “Today I Found Out. “How did the Cold War Start and End.” Daily Knowledge News Letter. <http://www.todayifoundout.com/index.php/2013/11/cold-war-start-end/> [accessed: March 9, 2015].
- Treaty between the United States of America and the Union of Soviet Socialist Republics on Strategic Offensive Reductions (START I)” NTI.  
<http://www.nti.org/treaties-and-regimes/treaties-between-united-states-america-and-union-soviet-socialist-republics-strategic-offensive-reductions-start-i-start-ii/> [accessed January 8, 2015].
- “Treaty between the United States of America and the Union of Soviet Socialist Republics on Strategic Offensive Reductions (START II).” NTI: Building a Safer World. <http://www.nti.org/treaties-and-regimes/treaty-between-united-states-america-and-union-soviet-socialist-republics-strategic-offensive-reductions-start-ii/> [accessed: March 10, 2015].
- “Treaty between the United States of America and the Union of Soviet Socialist Republics on Strategic Offensive Reductions (START I)” NTI.  
<http://www.nti.org/treaties-and-regimes/treaties-between-united-states-america-and-union-soviet-socialist-republics-strategic-offensive-reductions-start-i-start-ii/> [accessed January 8, 2015].
- “Ukraine Crisis: Russian ‘Cargo-200’ Crossing the Boarder – OSCE.” *BBC News*. November 13, 2014. <http://www.bbc.com/news/world-europe-30039004> [Accessed: March 12, 2015].
- “United States New START Report.” Nuclear Forces: UNIDIR Project on Transparency and Accountability in Nuclear Disarmament.  
<http://nuclearforces.org/country-profiles/united-states> [Accessed March 12, 2015].
- U.S. Department of State: Diplomacy in Action. “New START Timeline.”  
<http://www.state.gov/t/avc/newstart/timeline/index.htm>. [accessed March 10, 2015].

ushistory.org. "The Manhattan Project." *U.S. History Online Textbook*.  
<http://www.ushistory.org/us/51f.asp> [accessed: March 9, 2015].

"U.S.-Russia Nuke Treaty Takes Effect." *Manila Bulletin*. February 6, 2011.  
<https://www.questia.com/article/1G1-248445211/us-russia-nuke-treaty-takes-effect>,  
Questia. [accessed January 9, 2015].

"Vladimir Putin: The rebuilding of 'Soviet' Russia." *BBC News*. March 27<sup>th</sup>,  
2014. <http://www.bbc.com/news/magazine-26769481> [Accessed: March  
13, 2015].

Wolfsthal, Jon B., Jeffrey Lewis, et al. *A Trillion Dollar Nuclear Triad*. James  
Martin Center for Nonproliferation Studies. Monterey, California.  
January, 2014. Money Institute of International Studies.  
[http://cns.miis.edu/opapers/pdfs/140107\\_trillion\\_dollar\\_nuclear\\_triad.pdf](http://cns.miis.edu/opapers/pdfs/140107_trillion_dollar_nuclear_triad.pdf)  
[Accessed: March 13, 2015].

Woolf, Amy F. "Next Steps in Nuclear Arms Control with Russia: Issues for Congress." 2014.  
Congressional Research Service: Issue Brief 1-34. *International Security & Counter  
Terrorism Reference Center*, EBSCOhost [accessed January 9, 2015].

Woolf, Amy F. "The New START Treaty: Central Limits and Key Provisions" August 27, 2014.  
Congressional Research Service. <https://www.fas.org/sgp/crs/nuke/R41219.pdf>,  
[accessed: January 8, 2015].

