

BACKGROUNDER

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New START and the Future of U.S. National Security *Michaela Dodge*

Abstract

The New Strategic Arms Reduction Treaty (New START) between the United States and Russia is set to expire on February 5, 2021. For arms control to advance U.S. national security interests and contribute to international stability, the United States must have a willing partner who shares an objective of arms control, namely contributing to international stability. Russia is not a trustworthy partner. Absent a fundamental change in Russia's aggressive and hostile behavior toward other countries, the extension of New START is contrary to U.S. national security interests.

The New Strategic Arms Reduction Treaty (New START) between the United States and the Russian Federation is set to expire on February 5, 2021. The treaty restricts each country to 700 deployed intercontinental-range ballistic missiles (ICBMs); submarine-launched ballistic missiles (SLBMs), and heavy bombers; 1,550 accountable nuclear warheads; and 800 deployed and non-deployed ICBM and SLBM launchers and bombers each. Absent a fundamental change in Russia's behavior, the extension of New START is not in the U.S. interest.

Russia's Actions Make the Extension of New START Undesirable

There are several critical issues that do not warrant an extension of New START. Russia has a large advantage in tactical nuclear weapons over the United States. The Senate's Resolution of Ratification to New START mandated that the United States enter into "negotiations with the Russian Federation on an agreement to address the disparity

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KEY POINTS

- New START's verification regime is limited at best and, at worst, tends to provide U.S. politicians and policymakers with a false sense of security.
- Supporters of a New START extension argue that strategic stability between the two countries will be damaged if the treaty is not extended. But Russia's behavior has been anything but stabilizing even with New START in force.
- Russia invaded Georgia in 2008 and Ukraine in 2014. It fights U.S. allies in Syria on behalf of Bashar al-Assad's dictatorial regime and on behalf of Iran, the world's largest state sponsor of terrorism.
- For arms control to advance U.S. national security interests and contribute to the international stability, the United States must have a trustworthy partner who shares an objective of arms control, namely contributing to international stability. Russia continues to demonstrate that it is not a trustworthy partner.

between the non-strategic (tactical) nuclear weapons stockpiles of the Russian Federation and of the United States" and "reduce tactical nuclear weapons in a verifiable manner." The United States has not been successful in negotiating an agreement with Russia to reduce the disparity between the two countries in tactical nuclear weapons. Russia continues to maintain at least a 10:1 advantage in this class of weapons.

This is concerning because Russia's doctrinal developments appear to lower Russia's threshold for nuclear weapons use. The 2018 Nuclear Posture Review (NPR) states that "Russian strategy and doctrine emphasize the potential coercive and military uses of nuclear weapons. It mistakenly assesses that the threat of nuclear escalation or actual first use of nuclear weapons would serve to 'de-escalate' a conflict on terms favorable to Russia."2 Russia is backing up its rhetoric with military exercises, practicing the use of so-called low-yield nuclear weapons. Further, its substantive investments in nuclear capabilities indicate that there is more to these developments than just its public rhetoric. Russia's provocative steps suggest that it mistakenly believes that it can exploit gaps at the lower levels of the escalatory ladder and control escalation of a nuclear conflict to achieve its objectives without risking a strategic nuclear exchange with the United States, even as it publicly denies such is the case.

The question of Russia's tactical nuclear capabilities is not just academic. If Russia believes it can exploit gaps on the lower levels of the so-called escalatory ladder, it is more likely to miscalculate in a conflict. It could also be more likely to pursue aggressive foreign policies involving conventional weapons.

U.S. forward-deployed and NATO forces are well within the range of Russia's large tactical nuclear weapons arsenal. The United States currently deploys about 200 B-61 tactical nuclear weapons to Europe. They serve as a visible reminder of a U.S. commitment to European security and are undergoing life-

extension measures in the United States. In addition to these sustainment efforts, the 2018 NPR proposes to add "supplemental capabilities," a low-yield nuclear warhead for the Trident missile in the short term and a sea-launched cruise missile in the longer term. To understand the seriousness of the issue, one must realize that uploading a low-yield warhead on a Trident II D5 SLBM means that the United States is not able to use these particular missiles for its higher-yield nuclear warheads, thus trading off a part of its strategic nuclear weapons capability for tactical nuclear weapons. Yet, the Trump Administration judged the developments in Russia's doctrine to be so serious that it was willing to make that trade.

U.S. "supplemental" capabilities are meant to offset any potential gaps that Russia might perceive. But Russia's tactical nuclear developments and new nuclear weapon systems outside an arms control framework decrease the overall value of New START to U.S. national security. Additionally, Russia has rejected any negotiation aimed at closing the large loopholes in New START, now being exploited by Russia, to achieve deployed strategic nuclear force levels beyond those allowed under New START. Examples of these loopholes include the absence of any continuous onsite monitoring and limits on the number of warheads on an ICBM.

Supporters of the New START extension argue that strategic stability between the two countries will be damaged if the treaty is not extended. But Russia's behavior has been anything but stabilizing even with New START in force. Russia invaded Georgia in 2008 and Ukraine in 2014. It fights U.S. allies in Syria on behalf of Bashar al-Assad's dictatorial regime and on behalf of Iran, the world's largest state sponsor of terrorism. It deploys forces to Venezuela. It attacked the United Kingdom, a U.S. ally, with chemical weapons last year.⁴ At least one British citizen died of an accidental exposure to the chemical agent that Russia used to poison former Russian military officer Sergei

^{1.} Treaty with Russia on Measures for Further Reduction and Limitation of Strategic Offensive Arms, April 8, 2010, Congress.gov, https://www.congress.gov/treaty-document/111th-congress/5/resolution-text (accessed April 15, 2019).

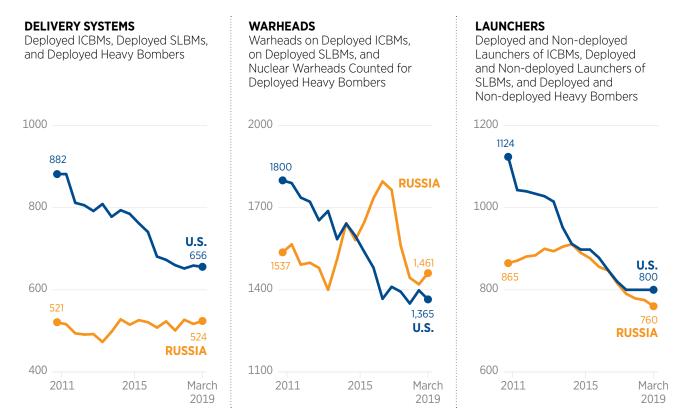
U.S. Department of Defense, Nuclear Posture Review, February 2018, https://dod.defense.gov/News/SpecialReports/2018NuclearPostureReview.aspx (accessed May 1, 2019).

^{3.} Patrick Tucker, "New New START a Nonstarter: Russian Ambassador," Defense One.com, March 12, 2019, https://www.defenseone.com/politics/2019/03/new-new-start-nonstarter-russian-ambassador/155474/?utm_source=Sailthru&utm_medium=email&utm_campaign=ebb-3-13&utm_term=Editorial%20-%20Early%20Bird%20Brief (accessed April 15, 2019).

^{4. &}quot;Russian Spy Poisoning: UK Warns Russia over Chemical Weapons," BBC, September 27, 2018, https://www.bbc.com/news/uk-45668986 (accessed May 2, 2019).

CHART 1

U.S. and Russia Long-range Nuclear Forces Under New START



NOTE: Figures for 2011–2018 are biannual.

SOURCE: U.S. Department of State, Bureau of Verification, Compliance, and Implementation, "New START: Fact Sheets," http://www.state.gov/t/avc/newstart/c39906.htm (accessed April 8, 2019).

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Skripal and his daughter. New START simply does not have the power to moderate Russia's extensive nuclear weapons program, nor its aggressive behavior, as long as Russia sees both as in its interest.

The treaty has not had any apparent moderating or stabilizing effect on Russia's international behavior. That is because New START does next to nothing to shape Russia's interests if Russia's ultimate goal is to wage a war on the United States and prevail. Therefore it is unlikely that the treaty's extension will have an impact on Russia's international behavior one way or another. In order to change Russia's behavior, the United States and its allies must take actions that convince the Russian leadership that its continued bellig-

erent behavior is too costly. Extending an arms control treaty tilted in Russia's favor is not such an action.

On the strategic forces level, while requiring U.S. force reductions in all treaty categories, Russia has not had to eliminate a single deployed nuclear warhead or deployed delivery vehicle as a result of New START. In fact, Russia was below the treaty limits in two of the three categories when the treaty came into force, allowing it to build up to the treaty limits in the categories of "Deployed ICBMs, Deployed SLBMs, and Deployed Heavy Bombers" and "Warheads on Deployed ICBMs, on Deployed SLBMs, and Nuclear Warheads Counted for Deployed Heavy Bombers."

Additionally, Russia increased its deployed nuclear

^{5.} U.S. Department of State, "New START Treaty Aggregate Numbers of Strategic Offensive Arms," Fact Sheet, June 1, 2011, https://2009-2017. state.gov/t/avc/rls/164722.htm (accessed April 15, 2019).

warheads by adding warheads or "MIRVing" up its deployed accountable delivery systems,6 which is considered particularly destabilizing because it seems to place a premium on a first-strike capability. The U.S. has explicitly reduced its ICBMs to a single warhead. Russia's actions were not met with many protests from the United States government or the international community, while the arms control community would have almost certainly criticized the United States had the roles been reversed. The treaty's implementation period ended in February 2018, by which time Russia appeared to be in compliance with New START limits. But the Russian state media occasionally reports Russian actions that would be violations of New START. For example, Colonel-General Sergey Karakayev, the Russian ICBM force commander, has repeatedly made statements that suggest Russia has a covert force of ICBMs.7

Transparency and New START

Proponents of the New START extension argue that the treaty extension is necessary in order to maintain insight into Russia's strategic arsenal. Asked whether he supports New START, General John Hyten, Strategic Command Commander, said he supported New START, but that "you have to have a partner that wants to participate in New START," and that the State Department is "reaching out to the Russians and the Russians are not answering favorably." There are several issues with the rationale that New START contributes to U.S. insights on Russia's strategic forces.

New START's verification regime is limited at best and, at worst, tends to provide U.S. politicians and policymakers with a false sense of security. The issues with New START's verification provisions are so severe that the New START Working Group, consisting of analysts from The Heritage Foundation and other organizations, called it "Potemkin village verification." The reality is that not a single inspection allowed under New START is capable of proving a violation of New START. At the time the treaty was submitted to the Senate's advice-and-consent process, the Obama Administration argued that the U.S. no longer needs as much verification as before, 10 presumably due to a supposed thaw in bilateral relations that would be brought about by the Administration's "reset" policy. That level of thaw in relations between the two countries has not come to pass.

New START's contribution to transparency is low, and will be even lower over time, as Russia deploys capabilities outside the treaty framework, including its new heavy Sarmat ICBM in the late stage of development. For one, the Russian negotiators and the U.S. negotiators agreed to not make the contents of data exchanges pursuant to New START public, making public discussions about Russia's nuclear forces more difficult. Additionally, Russia is unlikely to agree to include its new nuclear capabilities covered under New START and subject to the treaty's verification provisions.

The Russian Federation argues that its new nuclear weapons "have nothing to do with the strategic offensive arms categories covered by the treaty," and that the treaty does not cover criteria for determining new types of strategic offensive arms.¹¹ But Russia's new nuclear weapons only serve to further limit the utility of the treaty itself as nuclear weapons outside the treaty framework increase in prominence in the near future. Among Russia's new weapons systems is a new ICBM, a nuclear cruise missile, an unmanned underwater nuclear vehicle, and a supersonic weapon.¹² Some of these systems are relatively close to

- 6. MIRV stands for multiple independently targetable re-entry vehicle.
- Mark Schneider, "Russia's Growing Strategic Nuclear Forces and New START Treaty Compliance," Information Series No. 407, June 21, 2016, http://www.nipp.org/2016/06/21/schneider-mark-russias-growing-strategic-nuclear-forces-and-new-start-treaty-compliance/ (accessed April 15, 2019).
- 8. General John E. Hyten, testimony to the Armed Services Committee, U.S. Senate, February 26, 2019, https://www.armed-services.senate.gov/hearings/19-02-15-united-states-strategic-command-and-united-states-northern-command (accessed May 1, 2019).
- 9. The New START Working Group, "New START: Potemkin Village Verification," Heritage Foundation *Backgrounder* No. 2428, June 24, 2010, http://www.heritage.org/Research/Reports/2010/06/New-START-Potemkin-Village-Verification.
- 10. Paula A. DeSutter, "Verification and the New START Treaty," Heritage Foundation *Backgrounder* No. 1160, July 12, 2010, https://www.heritage.org/arms-control/report/verification-and-the-new-start-treaty#_ftn2.
- 11. Letter to the United States from the Russian Federation, "Problems related to implementation of the Treaty between the United States of America and the Russian Federation on Measures for the Further Reduction and Limitation of Strategic Offensive Arms of 2010," unofficial translation from Russian, *The Wall Street Journal*, December 2018, https://www.wsj.com/public/resources/documents/Russia.pdf (accessed April 15, 2019).

being operational, with the RS-28 Sarmat's (up to 24 warheads) initial operational capability being 2021, the year New START is currently set to expire. 13

Proponents of New START argue that the treaty allows the United States to count the actual number of deployed warheads. This statement is inaccurate. The structure of New START does not give the United States the ability to count the actual number of Russia's warheads with much confidence.

First, bombers are counted as one warhead regardless of how many warheads they actually carry, and so the actual number of deployed nuclear weapons can be higher at any given moment than a declared number. This provision tends to favor the United States, which has better bombers relatively speaking, but the United States is not taking advantage of this situation since its bombers no longer carry nuclear weapons on a day-to-day basis.

Second, warheads in maintenance facilities or on systems away from a base at the time of inspection as well as the mobile launchers and warheads within them are off-limits to inspectors, providing a loophole to deploy more warheads than declared under New START.

Third, New START does not contain limits on a maximum warhead number deployed per missile and does not set throw-weight limitations and launch-weight limitations. Russia is developing and deploying new nuclear warheads and launchers. ¹⁴ If these new warheads are smaller than warheads that Russia has deployed in the past, Russia can deploy many more of them above New START levels with no appreciable risk of being caught during an inspection.

Fourth, for all intents and purposes, Russia's telemetry regime is all but eliminated for verification purposes since Russia decides which data it will share. Telemetry helps the United States understand one of the key characteristics of a ballistic missile: its throw weight, which helps to determine how many warheads a missile can actually carry. It can also show when a missile releases a re-entry vehicle (RV).

Fifth, in the past, Russia's physical covers over the

re-entry vehicles made it difficult to confirm the number of RVs on a missile. To a limited degree, potential issues can be dealt with onsite during inspections or can be raised in the Bilateral Consultative Commission, New START's implementation body.

Both Russia and the Obama Administration rejected the more effective Strategic Arms Reduction Treaty "look alike, count alike" approach and type rules. Under the old regime, each missile was attributed a number of warheads it could carry regardless of how many warheads an inspector saw on it during an onsite inspection. The Russians misled the United States about capabilities of their missiles, but nevertheless this approach allowed the United States to better understand a baseline capability of Russia's missile forces. Taken together, the limitations of New START mean that even if an inspector finds a missile deploying more RVs than the United States thinks Russia can deploy, it does not say much about how many RVs other missiles of the same type in the Russian arsenal carry. Also, it does not provide information about an RV capacity of missiles in Russia's arsenal, making it very difficult to charge the Russians with a violation of New START. Even the unique identifiers do not add much to the verification regime per se; since they can be decided upon by each of the parties, it is difficult, if not impossible, to determine whether they have been tampered with. 15 In essence: The U.S. should forget about counting the total number of Russia's deployed warheads.

The most consequential tools allowing the U.S. to understand Russia's nuclear weapons modernization program and its nuclear weapons capabilities do not depend on New START. Even without New START, the United States will continue to utilize its national technical means (NTM) as well as other intelligence sources and methods to make judgments about Russia's nuclear weapons modernization, production complex, and capabilities. While New START does provide for noninterference with NTM, it allows concealment activities on ICBM bases and makes verification of mobile missiles almost impossible via

^{12.} Andrew Osborn, "Putin, Before Vote, Unveils 'Invincible' Nuclear Weapons Counter to West," *Yahoo News*, March 1, 2018, https://news.yahoo.com/putin-election-unveils-nuclear-weapons-counter-west-123827367.html (accessed April 15, 2019).

^{13.} Mark B. Schneider, "Does Russia Have 2-to-1 Advantage in Deployed Strategic Nuclear Weapons?" Real Clear Defense, January 12, 2019, https://www.realcleardefense.com/articles/2019/01/12/does_russia_have_2-to-1_advantage_in_deployed_strategic_nuclear_weapons_114100.html (accessed April 15, 2019).

^{14.} U.S. Department of Defense, Nuclear Posture Review.

^{15.} DeSutter, "Verification and the New START Treaty."

these means, because the entirety of Russian territory could be a base for their deployment.

Lastly, Russia is unlikely to agree to make its new nuclear weapons subject to the treaty's existing provisions. Even if Russia agreed, depending on the systems and types, both countries might be required to come up with new type rules, "look alike, count alike" approaches, and inspection provisions, subject to negotiations.

There is one area in which New START maintains some of its value. The Bilateral Consultative Commission is one of the very few bilateral avenues through which the United States and the Russian Federation are required to discuss strategic nuclear matters. But there is no inherent reason prohibiting discussing these matters in other official or unofficial venues, and indeed the Trump Administration ought to maintain lines of communication. Their value is particularly important in the context of U.S. allied relationships.

Allies worry that Russia's nuclear weapons modernization program, the potential for miscalculation with grave consequences, and maintaining a dialogue on these important matters indicates responsibility for these serious matters on both sides. If Russia is not interested in having a dialogue on these issues, the Administration ought to be able to communicate such to its allies and partners as a way get them on board to increase pressure on Russia to continue discussions. The United States should also articulate and describe its other communication efforts with the Russian Federation to allies and to the general public.

Russia's Manufactured Accusations

Russia is currently making assertions related to U.S. compliance with New START, potentially setting the stage for letting the treaty expire without an extension. The issue has to do with U.S. conversions of 56 submarine-based Trident II D5 launchers and 41 heavy bombers from nuclear to non-nuclear. Russia raised additional concerns regarding the "ICBM launchers at three American ICBM bases and one launcher" at Vandenberg Air Force Base in Califor-

nia.¹⁷ The Russians assert that they are not convinced that America's completely treaty-compliant actions to turn these systems from nuclear to non-nuclear are sufficient for the systems to be excluded under New START's central limits.¹⁸

These U.S. actions are not a violation of the treaty. It would be very difficult, if not impossible, to convert these systems back to their nuclear status. Besides, New START does not require these conversions to be irreversible. The treaty specifies some conversion procedures and leaves it up to each of the parties to determine others. It does not require that the other party agree to them. The treaty does require a party to perform a demonstration of said conversion procedures, which the United States did on September 10, 2015, for the heavy bombers, and September 15, 2015, for the Trident launchers. The United States has offered additional transparency measures to mitigate Russia's concerns, to no avail.

Untrustworthy Partner

For arms control to truly advance U.S. national security interests and contribute to international stability, the United States must have a willing partner who shares an objective of arms control, namely contributing to international stability. Said counterpart need not necessarily share U.S. national security goals, but his goals should not be fundamentally opposed to U.S. and allied national security goals.

Russia is not a trustworthy partner. Today, Moscow is in violation of a whole host of its international obligations, including taking actions for years that led to the collapse of the Intermediate-Range Nuclear Forces (INF) Treaty. Russia also violates or is in noncompliance with the Open Skies Treaty and the Conventional Forces in Europe Treaty, routinely violates U.S. and allied airspace, and illegally intrudes on territory of U.S. allies, including illegally removing an Estonian citizen and holding him in Russia for years. Its Chemical Weapons Convention violations led to the death of a British citizen on the United Kingdom's soil. As of the writing of this *Backgrounder*, Russia is illegally holding captive 24 Ukrainian sail-

^{16.} Carnegie Endowment for International Peace, "The Future of U.S.-Russia Arms Control," 2019 Carnegie International Nuclear Policy Conference, March 11, 2019, transcript, https://s3.amazonaws.com/ceipfiles/pdf/NPC19-FutureUSRussiaArmsControl.pdf (accessed April 15, 2019).

^{17.} Letter to the United States from the Russian Federation, "Problems related to implementation of the Treaty between the United States of America and the Russian Federation on Measures for the Further Reduction and Limitation of Strategic Offensive Arms of 2010."

^{18.} Ibid.

ors, who were kidnapped from their ships by the Russian coast guard.¹⁹

While Russia's untrustworthiness is not reason alone to let New START expire (after all, the United States maintained arms control agreements with the Soviet Union), Washington must be clear-eyed about the treaty's benefits (or lack thereof) and purpose. First, New START (and arms control treaties in general) will not restrict or prevent Russia from doing what it perceives is in its interest, even if these interests fundamentally clash with goals of U.S. foreign policy. "Russia want[s] to share a world consistent with their [sic] authoritarian model—gaining veto authority over other nations' economic, diplomatic, and security decisions."20 The United States ought to plan its military, nuclear weapons capabilities, and arms control strategy accordingly. Second, the current lack of verifiable Russian New START violations likely has to do with limitations in the treaty's verification provisions, not with a fundamental change in Russia's behavior. Russia has violated almost all arms control agreements it has ever signed.

Educating Allies on Arms Control: A Necessity for the U.S.

The Trump Administration must recognize that New START is not the INF Treaty that Russia blatantly violated for years, and that allies are more likely to worry about the demise of New START than they did about the demise of the INF Treaty. And, that the shortfalls of New START are more complex to explain. Opinions within the alliance structures are unlikely to be either uniform or categorical. The general public and sometimes most of the political representation in allied countries do not understand nuances of arms control or technicalities associated with verification regimes, where the devil is usually in the details.

The first task of the Trump Administration, whether it decides to extend New START or not, is to start explaining now how New START is deficient in terms of limiting and providing insights into Russia's nuclear arsenal. This is important because the U.S. must not create a false sense of security stemming

from simply having an arms control agreement with the Russian Federation.

No Need to Rush. Article XIV of the treaty provides for an option to extend the treaty by "no more" than five years "unless it is superseded earlier by a subsequent agreement on the reduction and limitation of strategic offensive arms."21 Provided that both parties agree, the procedure is straightforward, quick, and does not require the Senate's advice and consent. From that perspective, the Administration does not need to rush on a decision to extend New START. The Administration also does not necessarily need to extend New START by five years; incremental extensions are, in principle, possible, provided that the Russian Federation agrees. The United States and Russia could also replace New START with an improved agreement. In order to be able to negotiate an improved agreement, the U.S. government must develop a cadre of experts with background on arms control and knowledgeable about the history of the past arms control negotiations and their benefits and pitfalls.

Lack of U.S. Nuclear Weapons Modernization.

Some proponents of New START argue that the treaty must be maintained because the U.S.'s nuclear weapons production capability has so degraded that the U.S. could not even hope to compete with Russia in an environment where there are no arms control constraints limiting warheads. This characterization is somewhat accurate. Russia maintains a larger upload capability and warhead availability than the United States, meaning it can deploy more warheads on its missiles than can the United States. Its nuclear weapons arsenal is more modern than that of the United States. The Russians "started their modernization program in 2006. They're about 80 percent through completing the modernization of their triad. They'll be pretty close to being through by about 2020," General Hyten said during a recent hearing.²²

The fact that Russia's nuclear weapon systems are modern while those of the U.S. are not limits the value that Russia attributes to potential arms control agreements. Sergei Ivanov, then-Kremlin Chief of Staff, declared in 2013: "When I hear our American

^{19.} Thomas Grove, "Russia Fires on Ukrainian Military Vessel Near Crimea," *The Wall Street Journal*, November 25, 2018, https://www.wsj.com/articles/russia-fires-on-ukrainian-military-vessel-near-crimea-1543177712?mod=searchresults&page=1&pos=14 (accessed May 2, 2019).

^{20.} U.S. Department of Defense, "Summary of the 2018 National Defense Strategy of the United States of America," January 19, 2018, http://nssarchive.us/wp-content/uploads/2018/01/2018-National-Defense-Strategy-Summary.pdf (accessed April 15, 2019).

^{21.} Treaty with Russia on Measures for Further Reduction and Limitation of Strategic Offensive Arms.

^{22.} General Hyten, testimony before the Armed Services Committee, U.S. Senate.

partners say: 'let's reduce something else', I would like to say to them: 'excuse me, but what we have is relatively new.' They [the Americans] have not conducted any upgrades for a long time. They still use Trident [missiles]."²³ The Obama Administration's 2013 call to reduce nuclear arsenals by a third below New START levels was met with scorn by Russia.²⁴

The logic of the argument that the United States ought to keep New START because it cannot currently compete with Russia is fundamentally flawed: New START does little to restrict Russia's total nuclear weapons deployments. If the United States is not able to credibly compete, it ought to fix the reasons why it cannot compete rather than rely on flawed arms control agreements like New START or the INF Treaty for its security. These reasons have to do as much with U.S. repeated deferrals of nuclear weapons modernizations efforts as they have with delays in nuclear weapons infrastructure recapitalization efforts resulting in deteriorated nuclear weapons infrastructure and nuclear weapons policies that make it harder to obtain excellence in the nuclear weapons enterprise as a whole. If the United States cannot compete, and Russia manages to obtain a significant nuclear weapons superiority, Russia will likely act more aggressively in the conventional realms, too, creating further challenges to U.S. interests worldwide.²⁵

The Obama Administration and the Senate recognized the need for nuclear weapons modernization during the debate over the New START resolution of ratification in 2010. The New START resolution of ratification states that

the United States is committed to proceeding with a robust stockpile stewardship program, and to maintaining and modernizing the nuclear weapons production capabilities and capacities that will ensure the safety, reliability, and performance of the United States nuclear arsenal at the New START Treaty levels.²⁶

The Obama Administration committed to investing more than \$85 billion for the National Nuclear Security Administration's weapons activities account between fiscal years (FYs) 2010 and 2020. The pledged funding levels were not always met—for example, the FY 2013 appropriated amount is almost one *billion* below the amount the Obama Administration pledged during the New START debate. Additional issues and delays have been caused by unpredictability stemming from continuing resolutions and budget caps instituted by the Budget Control Act.

Key nuclear infrastructure capabilities and other modernization efforts pledged during the time when New START entered into force have been delayed or reduced, including a termination of the Chemical Metallurgy Research Replacement building at Los Alamos National Laboratory, delays for the Uranium Processing Facility at Oak Ridge, delays in the B-21 nuclear bomber programs, and the delay in the procurement of the Ohio-class submarine. U.S. nuclear warheads sustained additional delays, including the W76-1 Life Extension Program (LEP), the B61-12 LEP, and the W78 replacement LEP.

While some suggest that U.S. nuclear weapons modernization ought to be linked with the New START extension, nuclear weapons modernization is absolutely essential on its own merits—regardless of whether the United States has arms control. Even Representative Adam Smith (WA), the Democratic Chairman of the House Armed Services Committee, who questioned the value of the current U.S. nuclear force posture plans previously, recognized this point when he likened the linkage between nuclear modernization and arms control to "giving foreign powers veto control over your national security interest"

^{23.} Russia Beyond, "Russia Not Interested in U.S.-Proposed Arms Reduction-Russian Presidential Chief-of-Staff," March 5, 2013, https://www.rbth.com/news/2013/03/05/russia_not_interested_in_us-proposed_arms_reduction_-_russian_presidenti_23504.html (accessed April 15, 2019).

^{24.} Roberta Rampton and Stephen Brown, "Obama Challenges Russia to Agree to Deeper Nuclear Weapon Cuts," Reuters, June 19, 2013, https://www.reuters.com/article/us-obama-berlin-nuclear/obama-challenges-russia-to-agree-to-deeper-nuclear-weapon-cuts-idUSBRE95J01K20130620 (accessed April 15, 2019).

^{25.} Matthew Kroenig, The Logic of American Nuclear Strategy: Why Strategic Superiority Matters (Oxford: Oxford University Press, February 22, 2018).

^{26.} Bureau of Arms Control, Verification, and Compliance, "New Start Treaty Resolution of Advice and Consent to Ratification," December 22, 2010, https://www.foreign.senate.gov/imo/media/doc/SFRC%20New%20START%20Resolution%20FINAL.pdf (accessed April 15, 2019).

^{27.} News release, "Fact Sheet: An Enduring Commitment to the U.S. Nuclear Deterrent," The White House, November 17, 2010, https://obamawhitehouse.archives.gov/the-press-office/2010/11/17/fact-sheet-enduring-commitment-us-nuclear-deterrent (accessed April 15, 2019).

and stated that "would not be a smart thing to do." ²⁸ Chairman Smith is absolutely correct on this point.

Since the end of the Cold War, the United States has prioritized nuclear weapons reductions over investing in its nuclear weapons arsenal. As the national security environment deteriorated since the end of the Cold War, the U.S would be wise to "look reality in the eye and see the world as it is, not as we wish it to be."29 Nuclear weapons modernization is long overdue and necessary because U.S. nuclear weapons continue to be the ultimate guarantor of U.S. and allied security. They deter catastrophic attacks against the United States and allies, both nuclear and conventional. They also dissuade allies from increasing the number of nuclear weapons in their own arsenals or from developing nuclear weapons of their own. U.S. nuclear delivery systems are old, and the average age of the U.S. nuclear warheads is the highest it has ever been.

New START: Next Steps

The Administration and Congress must work together to put U.S. nuclear forces and arms control policy on a sound footing. Both must ensure that the United States can compete with the Russian Federation, including in the strategic area of nuclear weapons modernization. The Administration and Congress should:

- **Reject a New START extension.** The Trump Administration should not extend New START at this time. The Russian Federation is not a trustworthy partner and the treaty's contributions to U.S. national security are limited.
- Modernize the U.S. nuclear weapons arsenal. U.S. nuclear warheads and delivery systems are old and must be modernized and recapitalized as soon as possible. Costs associated with this modernization and recapitalization program are marginal relative to benefits that U.S. nuclear weapons bring to U.S. and allied security. These programs are critical regardless of the New START extension or arms control in general.

- Modernize U.S. warhead infrastructure. Nuclear infrastructure modernization is not only a prerequisite for successful future modernization efforts, but also for future arms control and nonproliferation efforts. Currently, the United States is outcompeted in terms of nuclear warhead production complex capacity by Russia, China, and potentially by North Korea. That does not bode well for U.S. or allied security, nor for future arms control prospects.
- **Develop arms control expertise within the U.S.**government. The United States must develop the next generation of arms control experts within the U.S. government. These experts will be instrumental in negotiating the next agreement with the Russian Federation, and perhaps China and others, in the years ahead regardless of what happens with New START right now. Such expertise was to some degree lacking during New START negotiations, which is why the United States ended up with an agreement full of limitations that the Russian Federation can exploit.³⁰
- Educate allies on New START's flaws. Most U.S. allies do not have an in-depth expertise in nuclear weapons policy, deterrence, or arms control, and developing such knowledge is critical to conduct an informed discussion about these important issues that goes beyond headlines and Tweets. Additionally, an informed discussion about these issues makes it more difficult for Russian propaganda to exploit divisions between the United States and an ally, or among allies themselves. Increasing U.S. government educational efforts leading up to a decision about the New START extension must be a critical component of a U.S. strategy regarding the issue.
- Maintain communication links with the Russian Federation. The United States ought to continue to discuss strategic issues with the Russian Federation regardless of what happens with New START in a variety of official and unofficial venues.

^{28.} Carnegie Endowment for International Peace, "The Future of U.S.-Russia Arms Control."

^{29.} U.S. Department of Defense, Nuclear Posture Review.

^{30.} Mark B. Schneider, New Start: The Anatomy of a Failed Negotiation (National Institute for Public Policy, 2012), http://www.nipp.org/wp-content/uploads/2014/12/New-start.pdf (accessed April 15, 2019).

■ Deploy robust, layered, and effective missile defenses on an urgent basis. President Ronald Reagan's force build-up, including deployment of U.S. intermediate-range nuclear weapons in Europe, certainly got Soviet President Mikhail Gorbachev's attention. It was President Reagan's pursuit of the Strategic Defense Initiative that convinced the Soviet Union that it could not defeat America. It is absolutely critical that, like President Reagan, President Trump and future American Presidents do not use missile defenses as a bargaining chip with Russia. Russia would simply pocket the concession and then deploy whatever offensive weapons it deems necessary regardless of its international obligations.

The United States has a unique opportunity to put its arms control policy on a sounder footing. Funding nuclear weapons modernization and rejecting arms control agreements that do not serve U.S. national security are good first steps.

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