

# New START: Security Through 21st-Century Verification

**O**n July 1, 1988, a U.S. inspection team flew to the Soviet Union to inspect one of its intermediate-range-missile operating bases. Upon arrival in Moscow, the team announced to the Soviet escorts that it would inspect Rechitsa, an SS-20 missile base located in present-day Belarus. The visit to Rechitsa marked the first time a U.S. inspection team had the opportunity to inspect a Soviet operating base for nuclear-armed intermediate-range ballistic missiles.

On the same day, a Soviet team of inspectors arrived at Travis Air Force Base in California to inspect intermediate-range-missile facilities there and at bases in Arizona, Utah, and Colorado. In the 22 years since these first inspections occurred under the Intermediate-Range Nuclear Forces (INF) Treaty, on-site inspections have been a vital means of verifying compliance with arms control treaties between the United States and the

Soviet Union, the post-Soviet successor states, and now the Russian Federation.

With the December 2009 expiration of the 1991 Strategic Arms Reduction Treaty (START), the United States is unable, for the first time in more than 20 years, to conduct nuclear arms inspections inside Russia.

The New Strategic Arms Reduction Treaty (New START), which was signed April 8 and is before the Senate for its

advice and consent to ratification, provides for a resumption of vital on-site inspections of Russian strategic nuclear facilities. There is no substitute for on-site inspections. They provide not only the “boots on the ground” presence to confirm Russian data declarations, thus helping to verify compliance with treaty obligations, but also insights into Russian strategic forces located at those facilities. Simply put, the United States is more secure and safer when our country is able to gain a better understanding of the Russian strategic arsenal.

New START is a continuation of the international arms control and nonproliferation framework that the United States has worked hard to foster and strengthen for the last 50 years. It will provide ongoing transparency and predictability regarding the world’s two largest strategic arsenals, while preserving the United States’ ability to maintain the strong, credible nuclear deterrent that is a key element of U.S. national security and the security of U.S. allies and friends.

## **Building on a Legacy**

New START continues a bipartisan tradition of concluding agreements that verifiably reduce and limit U.S. and Russian nuclear forces. The INF Treaty was negotiated and ratified during the Reagan ad-

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ministration. START was signed by President George H.W. Bush in 1991. Following the breakup of the Soviet Union, Secretary of State James Baker negotiated the Lisbon Protocol to ensure that the former Soviet states of Belarus, Kazakhstan, Russia, and Ukraine would assume the START obligations. Thereafter, the Clinton administration provided leadership and support that led to the denuclearization of Belarus, Kazakhstan, and Ukraine with assistance provided through the Cooperative Threat Reduction program, which was created by Senators Sam Nunn (D-Ga.) and Richard Lugar (R-Ind.) to help ensure that nuclear weapons did not fall into the wrong hands after the 1991 breakup of the Soviet Union.

During the administration of President George W. Bush, the Strategic Offensive Reductions Treaty (SORT) was negotiated and ratified. Later, recognizing that START would expire in 2009, Bush began talks with Russian President Vladimir Putin about a follow-on arrangement. They first discussed it at a meeting in Kennebunkport in July 2007 and then agreed at the Sochi summit in April 2008 to continue developing a legally binding post-START arrangement.

Thus, in negotiating New START, we had a rich history of arms control experience with Russia on which to build, just as each treaty before it built on the lessons learned from implementing predecessor treaties.<sup>1</sup> Conducting on-site inspections under the INF Treaty was a major breakthrough during the Cold War, signaling that the perestroika and glasnost' policies of Mikhail Gorbachev were truly beginning to affect the Soviet Union and how it did business. The on-site inspection concept was further developed and refined under START.

During the 15-year span of START, U.S. and Russian inspectors visited each other's intercontinental ballistic missile (ICBM) bases, submarine-launched ballistic missile (SLBM) bases, heavy bombers bases, missile test ranges, and storage facilities, among others. The first inspections under START began in March 1995 when, during the 120-day period after entry into force of the treaty, U.S. and Russian inspection teams conducted baseline inspections at all of the sites that the treaty covered. Because much territory had to be covered in a very short period of time, the U.S. inspection teams were organized



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**President Barack Obama (left) and Russian President Dmitry Medvedev shake hands after signing the New Strategic Arms Reduction Treaty in Prague April 8.**

according to weapons systems covered by the treaty: silo-based ICBMs, SLBMs, heavy bombers, or mobile ICBMs.

These baseline inspections began at the close of a very cold winter in Russia. U.S. inspectors often stood knee deep in snow while conducting three- to four-hour-long discussions with their Russian escorts on the nuances of inspection procedures. For many Russian and U.S. personnel, this was their first encounter with their counterparts from the other country, so initially the relationship was impersonal, formal, and sometimes adversarial. During the succeeding years of conducting START inspections, the demeanor on both sides developed into one of mutual respect as each side recognized that the other's inspection team members or in-country escorts were doing their jobs with competence, professionalism, and fairness while ensuring the exercise of their full and reciprocal rights under the treaty.

Over the life of START, the atmosphere during inspections continued to improve. "It's not personal, it's about the treaty"

became the mantra of the inspectors on both sides. Each side learned a great deal about the other's strategic forces during those on-site inspections. Thus, both sides gained a strong body of knowledge and experience about conducting on-site inspections efficiently and effectively under START and the INF Treaty; they also learned how to improve on them.

### **Verification in New START**

For the United States, New START is designed to allow for flexible modernization and operation of U.S. strategic forces, as well as predictability regarding the deployment of Russian strategic forces. This predictability is based on insights gained through a strong and effective verification regime. In New START, we created a verification regime that is effective and robust, adapted to the requirements of the new treaty while building on the knowledge gained from the practices of the past. We also agreed on a regime that would seek to address implementation prob-

lems from earlier treaties and avoid carrying such problems forward.

New START, along with its protocol and annexes, contains a detailed set of rules and procedures for verification, many of them drawn from START. We looked for ways, informed by earlier experiences, to make the verification regime simpler and safer to implement and, at the same time, minimize disrup-

smaller than those of the Soviet Union. Under New START, the United States and Russia each can deploy no more than 1,550 warheads.<sup>2</sup> A report by the Congressional Research Service notes that, over the course of the new treaty, Russia is likely to have 396 deployed launchers.<sup>3</sup>

The Soviet Union declared 70 facilities to be subject to inspection at the entry into force of START, but many of these

simple, safe, and cost-effective inspection regime for the new treaty. We also worked to develop measures unique to the requirements of this treaty, in particular on-site inspection procedures that will allow the United States to confirm the actual number of re-entry vehicles on each designated Russian ICBM and SLBM. This verification task and inspection right did not exist under START.

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tions to the day-to-day operations of both sides' strategic forces.

New START's verification measures are designed to ensure that each party is able to verify the other's compliance with the central limits of the treaty, including the right to maintain:

- no more than 700 deployed ICBMs, deployed SLBMs, and deployed nuclear-capable heavy bombers;
- no more than 1,550 warheads emplaced on deployed ICBMs and deployed SLBMs and nuclear warheads counted for deployed nuclear-capable heavy bombers; and
- no more than 800 deployed and nondeployed ICBM launchers, deployed and nondeployed SLBM launchers, and deployed and nondeployed nuclear-capable heavy bombers.

START was structured for a Cold War adversarial relationship with the Soviet Union, a country that had more than 10,000 nuclear warheads carried on more than 6,000 strategic missiles and bombers, most of them targeted against the United States and its allies. Now, the Soviet Union is gone, and the Cold War is over. Russian nuclear forces and their support complexes are substantially

have been shut down. Moreover, some were located in Belarus, Kazakhstan, and Ukraine, which are not parties to New START and no longer deploy strategic offensive arms. As a result of these changes, Russia provided site diagrams for only 35 facilities that will be subject to inspection under New START. Finally, Russia will likely choose to close down some of these remaining facilities over the life of the treaty.

The new treaty provides for the conduct of up to 18 on-site inspections annually, while START provided for 28 annual inspections. As noted above, however, there are only 35 facilities that will be subject to inspection at the beginning of New START—half the number that was subject to inspection at the beginning of START. In addition, the inspections under New START combine elements of the most commonly used types of inspections and exhibitions under START.<sup>4</sup> Furthermore, some New START inspections may be longer than their predecessors. Conducting fewer and longer inspections and combining inspection tasks mean fewer disruptions to U.S. and Russian strategic nuclear force operations, which is highly desired by military commanders.

Experienced inspectors and weapons system operators served on the U.S. and Russian negotiating delegations for New START. These experts made important contributions that helped us develop a

The United States will have the right to select, for purposes of inspection, from all of Russia's treaty-limited deployed and nondeployed delivery vehicles and launchers over the life of New START. It is also important to note that each deployed and nondeployed ICBM, SLBM, and heavy bomber will have assigned to it an alphanumeric code, or unique identifier. The unique identifier will be included in notifications any time the ICBM, SLBM, or heavy bomber is moved or changes status. The treaty establishes procedures to allow inspectors to confirm the unique identifier during the inspection process. The notification of changes in weapons systems, for example, movement in and out of deployed status, will provide more information on the status of Russian strategic forces under this treaty than was available under START. Information provided in notifications will complement and be checked by on-site inspection as well as by imagery from satellites and other assets that collectively make up each side's national technical means of verification.

The combination of national technical means, a comprehensive database that is constantly updated through notification of weapons system movements and changes in status, short-notice on-site inspections, and exhibitions will enable the United States to continue to gain insight into the Russian strategic forces as was the case under the verification regimes for START and the INF Treaty.

## Conducting Inspections

The new treaty provides that, within one hour of a base being designated for inspection by an inspection team, which will occur within four hours of the team's arrival at the point of entry, pre-inspection movement restrictions begin, and items of inspection (e.g., missiles, mobile launchers, and heavy bombers) present at that base must not be removed from the inspection site. This same requirement existed under START.

Once U.S. inspectors arrive at a base, they will receive a pre-inspection briefing from the Russian side. The briefing will provide much of the same information as those conducted under START, but for an inspection involving deployed missiles and warheads, it also must include:

- the number of re-entry vehicles emplaced on each deployed ICBM or SLBM located at the base;
- a breakdown of deployed and nondeployed launchers at the base,

i.e. those that have missiles in or on them (deployed) and those that do not (nondeployed);

- the number of deployed heavy bombers based and located at the base; and
- the number of nuclear armaments loaded on deployed heavy bombers at the base.

This information was not provided under START. New START not only makes all launchers or heavy bombers located at the base at the time of the inspection eligible for inspection, but requires updates on their declared status. The new treaty also requires updates on the number of re-entry vehicles or nuclear armaments emplaced on each deployed ICBM, SLBM, or nuclear-capable heavy bomber located at the base.

At ICBM or SLBM bases, the inspectors will designate for inspection one deployed ICBM or SLBM as well as a

nondeployed ICBM or SLBM launcher, if there are any nondeployed launchers at the base. The designated deployed ICBM or SLBM will be placed under continuous observation by the inspection team and then prepared for inspection by the host country. Preparation will include a display of the re-entry vehicle covers that will be used during the inspection so that they are fully visible to inspectors; in some cases, inspectors will measure them. For inspections conducted at air bases, three deployed heavy bombers will be designated for nuclear armaments inspection.<sup>5</sup>

Just as under START, each side will have the right to confirm that covered objects on the front section of ICBMs or SLBMs that are declared not to be nuclear re-entry vehicles are, in fact, not nuclear. This provision is beneficial to both sides because it ensures that additional objects declared by the inspected party (e.g., penetration aids and inert ballast) will not count toward the treaty's warhead limit.



Maxim Shipenkov/AFP/Getty Images

Col. Gen. Nikolai Solovtsov (second from right), commander of Russia's Strategic Rocket Forces, speaks to Medvedev as they walk in front of a Topol-M intercontinental ballistic missile at Teykovo Strategic Missile Division on May 15, 2008.

Radiation detection equipment may be used to confirm that the additional objects are not nuclear. Under New START, the two sides may agree in the treaty's Bilateral Consultative Commission (BCC) on new technologies for radiation detection that will be lighter and easier for inspectors to use than those that were available 15 years ago, when START entered into force.

We worked throughout the negotiations to preserve the key verification principle that short-notice inspections must be structured so that the side conducting an inspection has access to the forces present at a facility at the time the facility is designated for inspection. This principle, among others, deters cheating.

If the United States sees an anomaly during inspections that raises concerns about compliance, the U.S. side will raise its concerns first in the treaty's BCC and then, if necessary, at higher political levels. The U.S. government will treat very seriously any act that appears to violate the obligations of New START, just as it has with respect to the obligations of other treaties.

### Telemetry Exchange

The purpose of the exchange of telemetry information under New START is different than it was under START. New START's telemetry provisions are intended to encourage transparency and predictability. Unlike START, telemetric information is not needed to verify a party's compliance with the provisions of New START. For example, there is no treaty requirement to ascertain the number of warheads tested on a missile to determine the warhead attribution for that type of missile, because New START counts the actual number of re-entry vehicles emplaced on each missile.<sup>6</sup>

Therefore, the telemetry provisions are transparency rather than verification measures. Such a need was clearly recognized at the time SORT was negotiated. The verification regime of START was still in place, but Bush and Putin called for additional transparency measures to be developed to bolster it. New START has an effective verification regime, which is complemented by an annual telemetry exchange for purposes of transparency regarding strategic missile testing, as agreed by the parties.

The United States and Russia agreed

to allow for the annual exchange of telemetric information on an agreed equal number (up to five) of launches of ICBMs and SLBMs, with the testing party determining the launches for which it will provide information. The specifics of the annual telemetry exchanges will be worked out in the BCC.

The U.S. government believes that exchanging telemetric information will prove valuable to both sides. Although such information is not required to verify the specific provisions of the new treaty, it could be helpful in providing information about currently deployed missiles and new missiles under development on both sides.

### Conclusion

New START contains mechanisms that will enable the United States to monitor and inspect Russian strategic nuclear forces. U.S. knowledge of Russian nuclear forces will substantially erode over time if the treaty is not ratified and brought into force, increasing the risk of misunderstandings, mistrust, and worst-case analysis and policymaking.

New START sets the stage for further arms reductions. As the treaty's preamble states, the United States and Russia see New START as providing new impetus to the step-by-step process of reducing and limiting nuclear arms, with a view to expanding this process in the future to a multilateral approach. As President Barack Obama confirmed when he and Russian President Dmitry Medvedev signed New START in Prague on April 8, the United States will seek to include reductions in U.S. and Russian nonstrategic/tactical and nondeployed weapons in future discussions. Ratification of New START will be a key step to engaging Russia on its large stockpile of nonstrategic/tactical nuclear weapons. Without ratification and entry into force of New START, Russia will be reluctant to negotiate reductions or limitations on those weapons.

As Secretary of State Hillary Rodham Clinton testified before the Senate Foreign Relations Committee in May, the United States is better off with New START than without it. It is the right agreement for today and for the future. New START, quite simply, is in the best national security interests of the United States and of U.S. allies and partners around the world. **ACT**

### ENDNOTES

1. The United States also had a very experienced interagency team that participated in the negotiation of the treaty, including senior delegation members Marcie Ries, Ted Warner, Mike Elliott, Kurt Siemon, and Dick Trout. They, along with the inspectors and strategic forces experts on the delegation, were essential to the formulation of New START and its verification regime.
2. For more information on all aspects of New START, see [www.state.gov/t/vci/trty/126118.htm](http://www.state.gov/t/vci/trty/126118.htm).
3. Amy F. Woolf, "The New START Treaty: Central Limits and Key Provisions," *CRS Report for Congress*, R41219, June 18, 2010, p. 20.
4. Inspections are conducted on short notice at the request of one party and are conducted for the purpose of confirming the accuracy of declared data provided in accordance with the treaty, as part of the regime to verify compliance with the provisions of the treaty. Exhibitions are scheduled ahead of time between the parties and are used to demonstrate features of new types of strategic offensive arms that distinguish them from existing types and to confirm the technical characteristics of such new types. Exhibitions also are used to show the results of the conversion of the first item of a given type of strategic offensive arms subject to the treaty, including the distinguishing features for the converted system, which are intended to provide the basis for subsequent inspections to confirm the completion of conversion of such systems and that they have not been reconverted.
5. The kinds of covers used to shroud ICBM or SLBM re-entry vehicles and other objects, i.e., soft, hard, or combined covers, are defined in the treaty, and the procedures for their use and inspection are set forth in the Inspection Activities Annex. Such detailed procedures build on those used under START. Inspectors on the U.S. negotiating team helped improve this provision, based on their experience in conducting inspections under START. In particular, the right to observe and measure these covers is expanded under New START.
6. Under START, attribution rules were used to determine the number of warheads counted for each type of ICBM and SLBM. Under this practice, each deployed missile of a given type was counted as if it carried a particular number of warheads, even if the individual missile carried fewer re-entry vehicles than its attributed number of warheads. Under New START, the warhead count used for each missile will reflect the number of re-entry vehicles actually emplaced on each ICBM and SLBM.