

## How Russia's Nuclear Buildup Offers a Good Opportunity for Renewed Arms Control Dialogue

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Russian President Vladimir Putin said in 2015 that he [viewed](#) the United States as seeking “to destroy strategic balance, to change the balance of power in such a way not just to dominate but also to dictate their will to anyone.” Some may regard these as just words, but they hint at a justification for Russia’s nuclear weapon modernization program. If the Kremlin decides, even vaguely, that “the existence of the Russian Federation is under threat,” as per its 2014 military doctrine, a nuclear conflict could break out regionally or even globally. Moscow’s rhetoric about the status of its strategic arsenal has been belligerent at times, making its intent and the status of its development progress cloudy. For its part, the Western media has been posting alarmist comments about the growing capabilities of Russia’s nuclear arsenal and its new types of weapons under development (take for example the apocalyptic [Newsweek](#) headline: “The U.S.-Russia Nuclear Arms Race is Over, and Russia Has Won”).

Behind the strong talk, Russia has indeed made significant practical advancements in some areas of rearmament. Besides the rapid development and deployment of cruise missiles, which can strike almost any NATO member in Europe, Russia is actively shaking Cold War treaties such as the INF, either to build the weapons it desires or to engage the West from a better stance in non-proliferation negotiations. To offer a genuine assessment of Russia’s strategies and capabilities, it is necessary to evaluate the strong and weak points of its arsenal, rearmament programs, and state information campaigns on the matter. The analysis indicates that sheer alarm is not yet warranted; Russia is indeed improving its military capabilities but it is doing so in an uneven way.

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## Russia's Nuclear Arsenal Today

Here are the main capabilities and trends of Russia's strategic nuclear forces (SNF).

### *Strategic land-based systems*

Russia has developed a new, heavy *Sarmat* ICBM able to carry 10 warheads. It is similar in design to the Soviet *SS-18*. Perhaps more noteworthy, Russia has brought into question (since 2012) the effectiveness of the INF Treaty by testing its *Rubezh* ICBM at a distance similar to that of intermediate range missiles. Officially, the INF Treaty forbids the development and deployment of land-based missiles with a range between 500 and 5,000 km. (This whole class of missiles was liquidated by the United States and the USSR at the end of the Cold War.) In February 2017, Russia [deployed](#) the limited contingency of a new cruise missile, the *SSC-8*, which, according to experts, is a land-based version of the submarine-launched cruise missile (SLCM) *Kalibr*, which has a range of 2,500 km, making it also a breach of the INF limitations.

### *Strategic naval-based systems*

Russia's navy plans are embodied in its new navy doctrine that was published in July 2017. This document was written in the spirit of the Cold War, when the Soviet Union was a superpower whose capabilities were based on tremendous nuclear potential. In this doctrine, the phrases "nuclear and non-nuclear deterrence," "strategic stability," and "unacceptable damage" are used far more frequently than in Russia's Military Doctrine of 2014, revealing a return to Soviet methods of militaristic propaganda.

The Russian Navy created an improved version of the Soviet legacy *SS-N-23* submarine-launched ballistic missile (SLBM) called the *Sineva*, and also a modification of it called the *Liner*. The *Delta-IV* submarine that carries it has had its operational life extended. The *Bulava* SLBM is being deployed on two types of new *Borei*-class submarines, of which Russia should have eight by 2020. It is also [developing](#) a fifth-generation, strategic, missile submarine, the *Husky*, which is supposed to carry ballistic and cruise missiles come 2025.

There is concern about the *Kalibr* SLCM, which was successfully tested by Russia in its military operations in Syria. The *Kalibr* exists in both nuclear and conventional versions. It is primarily deployed by the Black Sea fleet and is able to reach most of Europe. According to some Russian experts, the [main trend](#) of Russia's navy is to equip most of its submarines (28 nuclear and 23 diesel) with *Kalibrs*, which should significantly increase the navy's potential to inflict damage.

One of the most serious concerns is the *Status-6* nuclear-powered, nuclear-armed, drone submarine, which former Pentagon official Marc Schneider called "the most irresponsible nuclear program that Putin's Russia has ever come up with."

### *Strategic aviation systems*

The main development is Russia's modernization of its *Tu-160* and *Tu-95* heavy bombers. These are armed with new, stealthy, long-range, strategic, nuclear cruise missiles, the *KH-101/102* (the numbers indicating both conventional and nuclear forms). Russia [plans to produce](#) at least 50 *Tu-160* bombers, although it currently has only 15. It also plans the development and deployment by 2023-25 of a new, stealthy, heavy bomber, the *Pak DA*, which should be able to carry cruise missiles as well as, [reportedly](#), hypersonic missiles.

### **How Real Are Russia's Nuclear Rearmament Plans?**

Western defense departments and policymakers should be paying close attention to Russia's nuclear rearmament plans, but irrational fears about Russia swiftly becoming an overshadowing nuclear giant are premature.

### *The realities of the land-based systems*

Russia's *Sarmat* ICBMs – called the *RS-28* in Russia and *Satan-2* by NATO – are not going to double the number of Russian land-based deployed ICBMs. They are meant to replace the aging *SS-18s*. Russia's manufacturing of the *Sarmat* is more of a deterrent necessity than a warzone danger. Russia would have entered into a significant "missile gap" with the United States if it did not plan and construct this class of ICBM by the time the *SS-18* is removed from service in 2022.

The *RS-28* is built at the Krasnoyarsk Machine Building Plant. Russia's 2014 conflict with Ukraine caused the cutting of all the ties between Russia and the Ukrainian producer of the *SS-18*, the Yuzhny Machinebuilding plant. Making these ICBMs in Krasnoyarsk is the de-facto resolution to the problem Russia faced at the breakup of the Soviet Union when the most of its heavy missile industries (as well as the factory that produces the lightweight *Satans*) became located in newly sovereign Ukraine. At present, the servicing of *Satans* is performed not by its maternal facility – a situation quite concerning from the standpoint of nuclear security. The original stipulation was that only the maternal facility could and should service these sensitive technologies.

Currently, the *Sarmat* program is behind in its testing schedule. A 2017 test launch was unsuccessful, indicating that its introduction may happen later than expected. A noteworthy aspect about the *Sarmat* is that it is not able to survive a nuclear blast. Therefore, [according](#) to Aleksey Arbatov, it is primarily designed for limited strategic warfare and as a first-strike weapon. Nonetheless, the introduction and deployment of *Sarmats* and the consequent removal of *Satans* will serve, in due time, to strengthen Russia's nuclear security posture.

There has been some controversy about the *Rubezh* ICBM (RS-26). Russia [denies](#) that it breaches the INF Treaty protocols, pointing out that in spite of the fact it was tested as an intermediate range ballistic missile, it is, in fact, an ICBM with a range of more than 6,000 km. Considering that the minimum range of the *Rubezh* is 2,000 km, it only symbolically fits into the framework of the INF Treaty. It is likely that Moscow is not seeking to totally undermine the INF through its tests of the *Rubezh* (over the last decade) but rather seeks to use it as a coercive tool in negotiations.

The SSC-8 cruise missile (the aforementioned land-based version of the submarine-launched *Kalibr*) situation is quite similar to that of the *Rubezh*. The United States has [said](#) that the SSC-8 appears to be noncompliant with the INF Treaty. The condition and status of the SSC-8 lacks transparency. The only aspect emphasized by experts is that its tests were conducted not with full range, therefore, Russia says, it [cannot](#) definitively be [qualified](#) as INF noncompliant. It is known that Moscow has complaints about the deployment of the U.S. *Aegis Ashore MK-41* vertical launch systems that are operational in Romania and Poland, and which Moscow [thinks](#) are possibly INF noncompliant. Thus, the deployment of the SSC-8 can also be regarded as an attempt by Russia to draw the United States into INF negotiations.

With the SSC-8 and *Rubezh*, Russia [has](#) good bargaining chips for dialogue, which raises the chances for both Moscow and Washington to increase mutual INF compliance. Bilateral discussions from more of a level field could enhance trust-building measures at a time when trust and mutual understanding in the U.S.-Russian dialogue are badly needed. As a Carnegie Endowment report [mentioned](#), “it may be paradoxically helpful that Russia has leveled its own charges of noncompliance with the INF Treaty against the United States.”

#### *The realities of the navy*

The Russian Navy is deployed to strategically important regions and its *Kalibr* missiles are able to reach most of Europe. Nonetheless, Russia is quite far behind in possessing a large naval modern fleet. Even the Soviet navy was considered a relatively weak link in its military posture, and this remains true today. In spite of strong Kremlin ambitions (and the assertions of the recent navy doctrine) to present Russia as the world’s second-leading naval power, its navy is not very formidable.

Russia’s main development focus has been on SLBMs, but even so, these occupy only 16 percent of Russia’s total SNFs. Plus, the most successful SLBMs in the Russian Navy, such as the *Sineva*, are Soviet carry-overs. The post-Soviet-developed *Bulava* missile (carried by *Borei*-class submarines) can hardly be called a successful project considering that over twelve years [only 18 tests](#) out of 26 have been successful.

Russia is not producing *Borei*-class submarines in the planned quantities. This implies that bringing the *Husky* fifth-generation submarine into active production in the near-to-medium future is rather fantastical. Russia's *Status-6* project, the nuclear-armed submarine drone mentioned earlier, was modestly [advertised](#) by Russia in 2015 and there have been recent reports that Russian has tested it. However, it may be more of a symbolic weapon than a useful one. As *The National Interest* [put it](#), "...given that Americans would be busy climbing from under the radioactive rubble created by Russian ICBMs, nuclear torpedoes would be the least of their worries." Indeed, one cannot imagine the use of the *Status-6* in circumstances other than global nuclear war. Not only would it destroy a seaport or a coastal city, it would cause a far-reaching tsunami and spread massive radioactive contamination.

In May 2017, Putin officially [postponed](#) the development of a new Russian aircraft carrier, the necessity for which looked justified after the obvious problems with the *Admiral Kuznetsov*, Russia's only seaworthy carrier that struggled to make a trip between St. Petersburg and Syria in 2016. The Kremlin also postponed producing a new class of nuclear-powered destroyers, which some [interpret](#) as signaling "the further postponement of Russia's restored blue-water naval ambitions."

#### *The realities of the aviation sector*

Russia has made some clear progress in this field. Russia demonstrated undeniable success in Syria with its air-launched cruise missile, the *X-101*. This is considered to be one of Russia's most successful weapons. It combines high precision capability with a fairly long range (4,500 km). It uses Russia's GLONASS satellite system and can be equipped with both conventional and nuclear 250-kiloton warheads (the *X-102* version). The *X-101/102*, however, is made only for Russia's air forces, which is traditionally one of the most vulnerable legs of the triad because the assets could theoretically be destroyed in a first strike. The *Tu-95* and *Tu-160*, the current backbones of Russian strategic aviation, need several hours to be [prepared](#) and then need to fly 5-14 hours from base to a potential target area. The development of a new long-range bomber is expected, but this means that it will take another decade for Russia to complete the modernization of its strategic aviation sector.

#### **Conclusion**

One of the main peculiarities of the Russian arsenal is that most of its conventional high-precision missiles have nuclear twins, which is not the case for the U.S. arsenal. This lowers the potential nuclear threshold significantly, paving the way for a swift and easy escalation from conventional conflict level to nuclear. This is alarming. On the flip side, however, Russia's weaponry flexibility and its aggressive nuclear posture overall can be employed to further the practical dimension of the "escalation for de-escalation" policy principle.

Russia's military strength is growing tremendously but there are slow-growth areas. Russia cannot be declared superior in any specific military dimension, either nuclear or conventional. Besides the successes of Russia's high-precision air- and submarine-launched missiles, Russia suffers from technical and financial hardships, particularly among its naval and land-based strategic legs. What we see are modernization systems being implemented and new designs in the works, but some of the re-armament maneuvering involves aspirations to engage the United States in INF Treaty discussions. Thus, even though there is distress about Russia's new weaponry, the advancements also open a surprisingly good window of opportunity for renewing arms control dialogue between Moscow and Washington.

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