

The Nuclear Posture Review and the Future of the INF Treaty

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In 2014, the Obama administration determined that Russia was violating the INF Treaty by producing and testing a prohibited INF-range ground-launched cruise missile and its launcher, but it never revealed which Russian cruise missile was the culprit.^[1] (The INF Treaty bans all ground-launched ballistic and cruise missiles with a range of 500-5,500-km.) Soon after the Obama administration left office, Michael Gordon, writing in the *New York Times*, reported that Russia had actually deployed the prohibited cruise missile.^[2] The Trump administration soon confirmed this story, but the precise missile involved was still not revealed.^[3] In June 2017, an unclassified intelligence report by the National Air and Space Intelligence Center, U.S. Air Force (NASIC), indicated that Russia had deployed the 3M14, a ground, sea, and submarine-launched cruise missile with a range of 2,500-km.^[4] The 3M-14 is the Russian Kalibr cruise missile.^[5] The military implications of the deployment of the Kalibr should be a significant issue in the Nuclear Posture Review (NPR).

There is little doubt about the capabilities of the Kalibr missile which were demonstrated in Syria. The Russian Defense Ministry has stated that its range is 2,500-km and President Vladimir Putin declared the Kalibr “can be equipped either with conventional or special nuclear warheads.”^[6] The June 2017 report of the Defense Intelligence Agency (DIA) on *Russia Military Power* noted, “The KALIBR-family of cruise missiles are some of Russia’s most capable systems,” have a “lower flight profile than other Russian cruise missile systems,” and are “capable of carrying conventional or nuclear warheads.”^[7] It also said, “With the arrival of two KALIBR-equipped vessels in 2016, the Russian Baltic fleet presents a significant long-range precision conventional and theater nuclear strike threat to Western Europe.”^[8] It is noteworthy that Russia’s Defense Minister General of the Army Sergei Shoigu announced that in the second quarter of 2017 some 60 Kalibr missiles were delivered to the troops.^[9] This number is apparently unprecedented and almost certainly fuels the prohibited deployment.

The ground-launched Kalibr missile will allow Russia to deploy large numbers of Kalibr missiles economically, dramatically increasing the threat to Europe and Asia. It no longer requires building expensive corvettes, frigates, and destroyers to deploy Kalibrs legally because the typical launcher for a ground-launched cruise missile is a small military truck. Moreover, in July 2017, state-run *Sputnik News* reported that Russia’s hypersonic cruise missile the Zircon, now

being tested at speeds up to Mach 8, “can be fired from the same launchers as the cruise missiles Kalibr and the anti-ship missile Oniks...”[\[10\]](#)

The Oniks is a supersonic anti-ship/land attack cruise missile, which is ground-launched by the Bastion system. According to the DIA report on *Russia Military Power*, the TSIRKON (Zircon), “is expected to enter service in 2018, [and] will have a 500 to 1,000 km range.”[\[11\]](#) The NASIC report says it is possibly nuclear capable.[\[12\]](#) Since its range is entirely within the INF Treaty prohibited zone, if it is launched from the mobile ground-based launchers of the Kalibr or the Bastion, this would be another serious violation of the INF Treaty. The Zircon could be an augmentation of the Kalibr and a potentially much more capable replacement for the Oniks in the Bastion system.

Prohibited ground-launched deployment of the Zircon is a real possibility. Russia is now aware that we are very reluctant to react to its arms control violations. There are apparently more Russian violations of the INF Treaty than just the prohibited Kalibr production, testing, and deployment. In July 2016, *Interfax*, Russia’s main unofficial news agency, reported, “The Bastion coastal defense system has an operational range of 600 kilometers and can be used against surface ships of varying class and type...”[\[13\]](#) There are other press reports that the Bastion has a range of 600-1,000-km.[\[14\]](#) The Bastion has been used against ground targets in Syria.[\[15\]](#) If Russia is already violating the INF Treaty, they will hardly hesitate to upgrade the capabilities of the Bastion system.

There is another Russian ground-launched cruise missile, the R-500, part of the Iskander system, which is widely reported to have a range that is prohibited by the INF Treaty. In November 2007, *Ria Novosti*, an official Russian Government news agency, reported, “The flight range of a new cruise missile adapted for Iskander and successfully tested in May 2007 could exceed 500 km (310 miles).”[\[16\]](#) In November 2008, it revealed that the potential range of the R-500 “can exceed 2,000 kilometers...”[\[17\]](#) *Kommersant*, a major Russian publication, maintained that the range of the R-500 “can amount to 1,000 kilometers.”[\[18\]](#) Writing in *Ria Novosti* and for the *UPI*, Russian journalist Ilya Kramnik said that the range of the R-500, and possibly a second missile type, could be between 1,200 and 3,000-km.[\[19\]](#) In 2014, noted Russian journalist Pavel Felgenhauer “said the missile (R-500) has been tested at a range of 1,000 km,” but the “range could be extended up to 2,000-3,000 km by adding extra fuel tanks.”[\[20\]](#)

These reports are quite credible because the R-500 is much too big to have a range of under 500-km. When it was first launched in 2007, then-Defense Minister Sergei Ivanov stated, “It can be used at long range with surgical precision, as doctors say.”[\[21\]](#) The R-500 has now been deployed.[\[22\]](#) Russia may also be in the process of upgrading the R-500 system because there are reports that the Kalibr missile has become associated with it.[\[23\]](#)

There are issues regarding the Russian RS-26 “ICBM’s” compliance with the INF and START Treaties. Bill Gertz, writing in *The Washington Times* and in *The Washington Free Beacon*, has stated that an intelligence community official told him, “The intelligence community believes it’s [the RS-26/Rubezh] an intermediate-range missile that [the Russians] have classified as an ICBM because it would violate the INF treaty’ if its true characteristics were known...”[\[24\]](#) Several prominent Russian experts have said the RS-26 has a theater-range attack

mission. According to *Kommersant*, former Duma Defense Committee Vice Chairman Alexsey Arbatov, said, "...judging from the unofficial assessments of the experts, this system is also designed for intermediate-range targeting, which de facto corresponds to the category of missiles eliminated under the [INF] Treaty..."^[25] He also linked the RS-26 MIRVed payload to intermediate-range targeting. Sergey Rogov, Vice Admiral (Ret.) Valentin Kuznetsov, Colonel General (Ret.) Viktor Yesin and Major General (Ret.) Pavel Zolotarev, experts associated with the USA and Canada Institute of the Russian Academy of Science, have called the Rubezh "an ICBM but with reduced flight range (consequently, it can accomplish missions for the destruction of targets in the European Theater)."^[26] According to the June 2017 NASIC report, "Russia claims it will deploy the RS-26 Rubezh for shorter-range targets..."^[27]

It is unlikely that the RS-26 can actually fly to over 5,500-km with its full warhead load which is reported in the Russian state media to be four warheads of 300-kt.^[28] The range of the RS-26 is clearly much less than any real Russian ICBM. (See chart on page 29 of the 2017 NASIC missile report.) The claim that the RS-26 is an "ICBM" is based completely on the Russian assertion that the missile was flown to 5,600-km on its first launch with a single RV.^[29] The NASIC report does not confirm this but merely states the Russian press asserts this.^[30]

Even if this is true, the missile was tested in the range of about 2,000 kilometers and with multiple warheads.^[31] This has never happened before regarding any ICBM. While there are occasional tests of Russian ICBMs to less than ICBM range,^[32] the vast majority of ICBM tests fly to ICBM range. In fact, the possibility of avoiding the INF Treaty's restrictions by labeling a prohibited missile an "ICBM" in just this fashion was raised by U.S. senators during the INF Treaty ratification process, and such testing was authoritatively interpreted as a violation of the INF Treaty.

In 1988, Senator Sam Nunn (D., Ga.) stated that "during the hearings [on the INF Treaty], concern was expressed that the Soviets could develop and deploy a new type of ground-launched ballistic missile to replace the SS-20 if the missile were tested the first time at a range in excess of 5,500 kilometers, even if every other test was at INF ranges." Senator Nunn then quoted a letter from Assistant Secretary of State Ed Fox stating the Reagan administration's interpretation of the treaty as follows: "If the test at strategic range was with a configuration (booster, stages, post-boost vehicle, RVs [reentry vehicles]) that is unlike that used for remaining tests of the system at INF range, the configuration tested to INF range would be considered a new missile in the INF range and prohibited by the Treaty."^[33] This describes the Russian- depicted RS-26 fact situation, and the Fox letter characterizes it as a Treaty violation.

Later on, the Reagan administration stated that if such testing occurred, it wanted to address the issue on a case-by-case basis. When it did happen, the Obama administration ignored the Fox interpretation and apparently did not do any case-by-case analysis of the RS-26 fact situation. This appears to be a violation of the Biden condition for INF Treaty ratification which stated that a Treaty must be interpreted as consistent with the way it was authoritatively explained to the Senate. Ironically, the Obama administration is the only one to have violated the Biden condition.

There is also a New START Treaty compliance issue relating to the RS-26. The RS-26 apparently uses the first two stages of the SS-27,[\[34\]](#) which is an ICBM maintained, stored and transported as an assembled missile in a launch canister. If so, this is a violation of the New START Treaty because the first stage of the missile is coming out of a production facility in two upper stage configurations. The same provision was in the START Treaty, and it was authoritatively interpreted during the Clinton administration when two versions of the SS-25 ICBM were produced.[\[35\]](#) Significantly, the House Armed Services Committee is attempting to mandate a study of the RS-26 compliance issue.[\[36\]](#)

There are major INF Treaty compliance issues associated with Russian surface-to-air missiles and missile defense interceptors. While the INF Treaty allows INF-range missiles of this type, it does so provided they are “solely” for air or missile defense.[\[37\]](#) In July 2010, Pavel Felgengauer wrote, “...Moscow plans to covertly quit the 1987 treaty on medium and short-range missiles” because the Russian S-300 and the S-400 air defense missiles, the new S-500 air and missile defense interceptor and the Moscow ABM interceptors are nuclear armed and can function as “dual-use as conventional or nuclear medium or shorter range ballistic missiles.”[\[38\]](#) He also wrote that this capability was actually demonstrated in the Russian Far East Vostok-2010 military exercise.[\[39\]](#) *Red STAR*, the official newspaper for the Russian Defense Ministry, has reported that Russia has 700 nuclear warheads for the Moscow ABM and its surface-to-air missiles.[\[40\]](#) In April 2015, Felgenhauer wrote that the Russian S-300 system (the shortest range of the systems he listed) has a nuclear ground-attack capability with a range of “up to 400 kilometers.”[\[41\]](#) This article contained a link to a statement by the President of Belarus to the effect that the S-300 had a surface-to surface capability. In February 2016, Felgenhauer noted that the S-300PMU2, which Russia has sold to Iran, can attack “land and sea targets” with precision accuracy.[\[42\]](#)

Evidence for the reported surface-to-surface role has now appeared in the Russian state media. In February 2016, *TASS* reported the S-400 “can also be used against ground objectives.”[\[43\]](#) *TASS* has reported this many times. State-run *Russia Today* has said the S-400 can strike ground and naval targets.[\[44\]](#) In March 2017, *TASS* quoted Col. Alexander Gordeyev, the head of the Eastern Military District’s press service, as saying, “Crews of the S-300 missile systems performed rocket strikes at ground air defense objects of a simulated enemy.”[\[45\]](#) If what Felgengauer says is true, the Moscow ABM system violated the INF Treaty since the first day it was in force because the range of some of its interceptors was long.[\[46\]](#) Whether the S-300 and S-400 surface-to-air missiles violate the INF Treaty depends upon their testing history. If the S-500 has a surface-to-surface role, it would be virtually impossible for this missile, with a stated intercept range of 600-km,[\[47\]](#) not to violate the INF Treaty once it is fully tested.

While this may not be a violation of the INF Treaty, Russia is in the process of circumventing it by the deployment of an advanced version of the nuclear capable Iskander-M ballistic missile with a reported range of 600-1,000-km.[\[48\]](#)

What does this mean for the NPR? First, Russia will violate any arms control agreement to the extent it finds necessary or convenient. If it gets away with violating the INF Treaty, the scope of its other arms control violations will likely increase. Second, the politics of arms control

compliance will restrict dissemination of critical information to much of the military. This has happened before,[\[49\]](#) and it will happen again. Third, diplomacy will not resolve the INF issues, and there will never be any NATO consensus on an arms control compliance issue. Hence, the U.S. must act on its own like the Reagan administration did when it terminated U.S. observance (under a “no undercut” policy) of the SALT I and II agreements in response to Soviet violations. Fourth, we have to deter a range of Russian military options that directly result from their violation and circumvention of the INF Treaty and their political commitments under the 1991-1992 Presidential Nuclear Initiatives regarding tactical nuclear weapons. Russia has achieved an enormous superiority in non-strategic nuclear systems that we cannot have because of continued unilateral U.S. compliance with the INF Treaty and the political commitments that Russia is violating. In effect, Russia has reconstituted the Soviet non-strategic or theater/tactical nuclear Triad while we have reduced our capability to dual capable fighter aircraft carrying only gravity bombs. This leaves us much more vulnerable than we should be which, in turn, could result in Russian first use of tactical nuclear weapons in a war against NATO. Today, the INF Treaty provides no security benefit for the U.S. or NATO. Its verification regime is long dead and, moreover, even if it still existed, it would not provide information relevant to the existing compliance issues unless Russia was really stupid and deployed prohibited missiles at bases open to inspection.

The military implications of the INF Treaty violations are stark. The Soviet INF-range ground-launched missile capability was extensive, but it was entirely nuclear, and the missiles were not very accurate. The emerging pattern of Russian INF Treaty violations will result in a force even more threatening. Russia is migrating to a ground-launched missile force that will probably be 100% dual capable with high accuracy. Russian ground-launched cruise missiles will also probably become hypersonic. Russian INF-range missiles probably carry precision low-yield and low-collateral damage nuclear weapons as well as traditional high yield weapons and a variety of conventional weapons. U.S. INF missiles have migrated to the Smithsonian, and, unless we change policy, they will remain there.

The NPR should address the implications of the Russian INF Treaty violations for global stability. China is also a beneficiary of the INF Treaty which is now providing no security benefit for the U.S. or our Asian allies. Indeed, the 2017 edition of the Pentagon’s annual China report confirms China is deploying the new DF-26 IRBM which “is capable of conducting conventional and nuclear precision strikes against ground targets and conventional strikes against naval targets in the western Pacific Ocean.”[\[50\]](#) The large Chinese force of ground-launched INF-range missiles could determine the outcome of a major war as well as making it much more likely.

Failure to react to Russia’s violations of its arms control commitments will significantly enhance the risk of war. The Reagan administration, which concluded the INF Treaty, would have terminated it in response to Russia’s egregious behavior. Its termination of the SALT I and II agreements in response to Soviet violations very likely contributed to the negotiation of the START and INF Treaties and resulted in some corrective action regarding Soviet violations in the late Soviet period. The failure of all administrations after George H.W. Bush to punish Russia for arms control violations has contributed to the situation we now face.

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Notes:

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