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Additional Information on Reports of Russian Violations of the INF Treaty

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In May 2012, the Russian Defense Ministry announced the successful launch of a new ICBM, the third new ICBM announced since the ratification of the New START Treaty. The Defense Ministry was unusually tight lipped about this launch, not even revealing the name of the new missile. It stated only that it was a mobile ICBM that made maximum use of existing components.¹ Russian press reports have been contradictory, ranging from reports that the new missile was a Bulava 30 SLBM derivative to reports it was a modified SS-27 Mod 2 (RS-24/YARS) or a larger version of the SS-27. The largest number of reports (*Lenta.ru*, *Kommersant*, *Gazeta.ru*,) say the new missile is based on the Bulava 30 SLBM which would be much more suitable to an intermediate range ballistic missile due to its shorter range and smaller size than the new MIRVed version of the SS-27 (RS-24) which is now being deployed.² The range of the Bulava 30 is reportedly only 8,000-km.³

The unusual secrecy about this new missile raises concerns that Russian silence relates to a treaty compliance issue. When a compliance issue is in play, Russia generally does not provide technical details about a new missile. For example, in the case of the MIRVed SS-27 which violated the START Treaty, Russia placed no information in the START data exchange on the characteristics of the missile and the exhibition of the missile was not held until March 2011, after the expiration of the START Treaty in December 2009.⁴ Under New START, information relating to the MIRVed SS-27 will never be released to the public.

If the new ICBM turns out to be a derivative of the Bulava 30 SLBM or a two stage version of the SS-27, the missile is likely intended to be an intermediate range ballistic missile (IRBM) posing as an ICBM in order to circumvent the INF Treaty. In the words of Colonel General (ret.) Viktor Yesin, “Roughly speaking, if the third-stage engine is removed from our three-stage inter-continental ballistic missile Topol-M [SS-27], one will have an intermediate

range missile.”⁵ A MIRVed IRBM could technically become an ICBM under New START by flying it over 5,500-km with a single RV, thus evading the INF Treaty prohibition.

This and a number of INF-related compliance issues was the subject of a letter from Congressman Michael Turner (R-OH) to Secretary of State of Hillary Clinton, Secretary of Defense Leon Panetta and General James R. Clapper, Director of National Intelligence. Congressman Turner received a response from Under Secretary of Defense James R. Miller which largely did not deal with the issues he had raised. Secretary Miller stated, “The recent test of a new type of Russian ICBM, as announced in the Russian press, was notified and conducted consistent with the requirements of the New START Treaty; it was not subject to any provisions or restrictions under the INF Treaty.”⁶ He did not say that Russia had provided a notification of a “new type” of ICBM, which is required by the New START Treaty.⁷ Mr. Miller did not respond on the other issues raised by Congressman Turner but promised, “Further information on the matters you raised will be available in the forthcoming Annual Compliance Report.”⁸ The Obama administration’s August 2012 report (*Adherence to and Compliance with Arms Control, Nonproliferation, and Disarmament Agreements and Commitments*) said nothing about the issues raised by Congressman Turner.

Russia has repeatedly threatened to withdraw from the INF Treaty. This issue was first raised by then-Defense Minister Sergei Ivanov (now Kremlin Chief of Staff) who called the Treaty a “mistake” and a “Cold War relic.”⁹ Then-Chief of the General Staff General Yuriy Baluyevskiy threatened to pull out of the treaty unless Washington decreased its missile defense plans. He said, “It is possible for a party to abandon the treaty [unilaterally] if it provides convincing evidence that it is necessary to do so,” and added that, “We have such evidence at present.”¹⁰ President Putin also threatened to withdraw from the INF Treaty.¹¹

In February 2007, then-Commander of the Strategic Missile Forces, Colonel General Nikolai Solovtsov said, “If the political decision is made to withdraw from this treaty (the Russian-American Intermediate Range Nuclear Forces Treaty, or INF) the Russian Strategic Missile Forces will be ready to fulfill this task.”¹² That same year, Russian Major General Midykhat Vildanov, a professor at the Academy of Military Sciences, called for “pragmatic

approaches” to the observance of the INF Treaty in support of the Russia’s national security.¹³ Major General Vladimir Vasilenko, head of the 4th Central Research and Development Institute of the Russian Defense Ministry stated: “Deploying ground-based medium-range missiles may be one of the options for insuring national security.”¹⁴

Instead of withdrawing from the INF Treaty, which would have exposed Russia to significant international criticism, Russia appear to be creating the same type of capability that existed before the INF Treaty by a combination of circumventions and Treaty violations where this is necessary. In addition to the new ICBM discussed above, which may take on the targeting role that the SS-20 had before the INF Treaty eliminated intermediate range ballistic missiles, Russia is now deploying a short-range ballistic missile, the Iskander M, which may have a range potential more than the 500-km allowed by the INF Treaty. (Unless it has flown over 500km, and there are no reports of it, the Iskander M would not be a legal violation of the INF Treaty.) Russian military expert Alexander Golts has pointed out that from time to time, Russian leaders and military officials hint that the Iskander missile can fly further than 500-km.¹⁵ *Izvestiya* reported that the Iskander range is 500-600-km.¹⁶ In 2006, then-President Vladimir Putin awarded Russia’s State Prize to developers of the Iskander-M tactical missile system.¹⁷

The first serious INF Treaty compliance issue, reported in the Russian press, was the R-500 ground-launched cruise missile. The first test of the R-500 in 2007 was announced by then-First Deputy Prime Minister Sergei Ivanov (now Kremlin Chief of Staff).¹⁸ Mr. Ivanov said, “It can be used at long range with surgical precision, as doctors say.”¹⁹ (Emphasis added) This is a very odd thing to say about a missile that is supposed to be short-range. However, it is consistent with many Russian press reports which say that the missile has a range of two to six times what is allowed under the INF Treaty.

After Mr. Ivanov’s announcement, Russian officials generally went silent about the new missile, which is unusual. Indeed, while President Putin gave the developers of the R-500 missile the Russia State Award, their names were not mentioned “because their identity is a state secret.”²⁰ Again, this is very unusual. It seems clear that the Russian Government does not want

the press talking to the missile's designers which could suggest there is an issue of compliance with the INF Treaty. After the first flight test, R-500 tests were not announced.

The Russian press soon began to report that the R-500 (Iskander K) was a violation of the INF Treaty. To violate the INF Treaty a cruise missile does not have to fly beyond 500-km (the INF Treaty prohibition is on missiles with a range of 500-5,500 kilometers) but merely have the range potential to do so. Under the INF Treaty, cruise missile range is the "maximum distance which can be covered by the missile in its standard design mode flying until fuel exhaustion, determined by projecting its flight path onto the earth's sphere from the point of launch to the point of impact."²¹ This is a deliberately restrictive definition. Since cruise missiles do not fly to fuel exhaustion, this effectively limits the maximum operational range of a ground-launched cruise missile, if the Treaty is complied with, to under 500-km.

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)."²² In November 2008, it revealed that the potential range of the R-500 "can exceed 2,000 kilometers..."²³ Russian arms control expert Viktor Myasnikov wrote that the R-500 exceeded the limit of the INF Treaty on its first test and its range could be expanded to 1,000 kilometers.²⁴ Russian journalist Oleg Vladykin stated the "R-500 cruise missile...range will presumably increase to 1000 km or more."²⁵ *Kommersant*, a major Russian publication, maintains that the range of the R-500 "can amount to 1,000 kilometers."²⁶ Sergi Balmasov, writing in *Pravda.ru*, indicated the R-500 has a range of 2,000-km.²⁷ Russian journalists Ivan Konovalov and Vladislav Litovchenko, writing in *Kommersant*, said the Iskander system can be armed with a cruise missile with "even greater" range than 500-km.²⁸ Yury Fedorov, Associate Fellow, Russia and Eurasia Programme, Chatham House, indicated "there are reports that it could have a range of up to 2000km, as it is an upgrade of the Soviet land based cruise missile RK-55, also known as CSS-X-4 Slingshot...destroyed in accordance with the INF treaty."²⁹ Mikhail Barabanov, chief editor of the *Moscow Defense Brief*, wrote that the R-500 range could be more than 1,000-km.³⁰ Writing in *Ria Novosti* and for *UPI*, Ilya Kramnik said that the range of the R-500, and possibly a second missile, could be between 1,200-3000-km.³¹ Kramnik concluded the R-500 was a violation of the INF Treaty.³²

In January 2009, he stated that “Iskander can be equipped with cruise missiles with a range of up to 2,000 km (1,243 miles), and even 3,000 km (1,865 miles) that will allow it to destroy targets anywhere in Western Europe.”³³

In 2009, the U.K. House of Commons Defense Committee noted reports that the R-500 has a 2,000-km range.³⁴ *Pravda.ru* has reported NATO experts were concerned that the Iskander K had a range of 2,000-km.³⁵ In addition, *STRATFOR* obtained information from Russians to the effect that:

The R-500 is a more conventional version of the old Soviet 3M10 long-range cruise missile with a range of 2,600 km, which was deployed on Russian nuclear attack submarines. These older missiles were eliminated also under INF [for now]. Testing of the R-500 will be completed by the end of 2009; it has been successful thus far. After that it would be a political decision whether to put it into service. Six missiles with the R-500s are already ready to be deployed.³⁶

In June 2007, then-First Deputy Prime Minister Sergei Ivanov predicted that the new cruise missile would be in production in 2009.³⁷ In November 2007, Colonel General Vladimir Zaritsky, then-commander of the missile and artillery forces indicated testing was going on and the missile was going to be operational in 2009.³⁸ He said, “Cruise missiles are being tested, I am satisfied with the progress and I am certain that the task of providing enough launchers armed with cruise missiles will be coped with on time....The military-industrial commission under the Russian government has set 2009 as the deadline.”³⁹ In November 2009, Russian Rocket Forces and Artillery Commander Lt. General Sergei Bogatinov said that development of an advanced cruise missile for the Iskander system was continuing.⁴⁰ In August 2012, *Interfax AVN*, an independent Russia news agency, reported, “Cruise missiles are being serially produced for Iskander tactical missile systems.”⁴¹

There is circumstantial evidence to support the Russians press reports concerning the range of the R-500. Photographs and video released appear to show a missile that is too large to be a short range cruise missile.⁴² Moreover, what is the purpose of a subsonic cruise missile on a system that already has a high speed ballistic (or probably, more accurately, semi-ballistic) missile? The only apparent advantage, consistent with the INF Treaty, would be more missiles on the launcher. The Iskander-M ballistic missile would clearly have a much shorter time to target and better defense penetration capability. The missile has a peak velocity that is

hypersonic and impacts at supersonic at speeds.⁴³ According to a report in *Vozdushno-Kosmicheskaya Oborona Online*, “Missile speed after the boost phase is 2,100 m/sec” and, “The missile maneuvers intensively with g-forces on the order of 20-30 in the boost and terminal phases of flight.”⁴⁴ The biggest advantage of adding a subsonic cruise missile to the Iskander systems is potentially a far longer range than is possible with the Iskander M.

In July 2010, Pavel Felgengauer, a distinguished Russian journalist, stated: “...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.”⁴⁵ The INF Treaty contains an exception to allow for missile and air defense interceptors used “solely” for air or missile defense but that exception would be lost if it also had a surface-to-surface role. If what Felgengauer claims is true, the Moscow ABM system violated the INF Treaty since its first day. Whether the S-300 and S-400 violate the INF Treaty depends upon their testing history. It would be virtually impossible for the S-500 with a stated intercept range of 600-km not to violate the INF Treaty once it is fully tested.

For years there has been talk in Russia of a new intermediate range ballistic missile (IRBM). The elimination of all START qualitative and numerical limitations on ICBMs and SLBMs in New START Treaty makes it fairly easy to circumvent the INF Treaty. Because of the permissiveness of New START, a MIRVed IRBM could legally be tested under New START as an ICBM by simply flying it in one test with a single warhead to a range of over 5,500-km. It could then be deployed on rail mobile launchers as what amounts to a heavily MIRVed IRBM and would be completely outside of both New START and the INF Treaty. In December 2011, Moscow Institute of Thermal Technology general designer Yuri Solomonov said, “The transformation of an intercontinental missile into a shorter range missile is not a very difficult task. There are certain problems but they are solvable.”⁴⁶ Russian press reports indicate that Mr. Solomonov was the chief designer of the new “ICBM” tested in May 2012. There is also a Russian press report which maintains that the new missile will carry 10 warheads.⁴⁷

The INF Treaty non-compliance described in the Russian press is fully consistent with historic Soviet/Russian compliance behavior and the pattern of Russia threatening preemptive nuclear strikes against U.S. missile defenses deployed in Europe.⁴⁸ The U.S. government appears to be ignoring all this activity. Despite the statement by Acting Under Secretary of State Rose Gottmoeller that social media can be an effective tool of verification,⁴⁹ apparently the Department of State does not regard reports by important Russian journalists and publications concerning the INF issues described in this paper, as having any importance.

None of these issues, according to the State Department's publication, *2011 Adherence and Compliance With Arms Control, Non-Proliferation, and Disarmament Agreements and Commitments* have been raised with the Russians.⁵⁰ The same is true in the 2012 report. The State Department's 2012 compliance report stated, "The Parties to the Treaty last met in the Special Verification Commission in October 2003. There have been no issues raised in the intervening period."⁵¹

The Obama administration is apparently ignoring its own interpretation of U.S. law relating to public disclosure of arms control violations. According to the administration's 2012 report, 22 U.S.C. 2593a.(a)(6) requires that the unclassified version of the compliance report "identifies questions [about foreign arms control compliance], to the maximum extent practicable."⁵² The administration's 2012 unclassified compliance report says nothing about the INF compliance issues discussed above, despite the fact that these are issues that are discussed in the Russian press.

A review of these issues and the May 2012 new missile launch and the other issues discussed in this paper is certainly warranted. Violating and circumventing the INF Treaty with impunity is far more in the Russian interest than withdrawal from the Treaty. The history of Russian arms control non-compliance certainly generates legitimate concern about Russian willingness to violate arms control agreements.

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² "Russia Successfully Tested a New Ballistic Missile To Spite the European Missile Defense," *Lenta.ru*, May 26, 2012, available at: <<http://wnc.dialog.com/>>.: Sergey Smirnov, "The Missile Took Off in the Second Attempt --

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³ “Russia Successfully Tested a New Ballistic Missile To Spite the European Missile Defense<” op. cit.

⁴ Mark Schneider, “The Future of the U.S. Nuclear Deterrent,” *Comparative Strategy*, June 2008, p. 352, available at <<http://www.ingentaconnect.com/content/routledg/ucst/2008/00000027/00000004/art00005>>.: “START Aggregate Numbers of Strategic Offensive Arms,” Washington D.C.: U.S. Department of State, October 1, 2009, available at: <<http://www.state.gov/t/avc/rls/130149.htm>>; “New START Treaty Implementation Update,” Washington D.C.: U.S. Department of State, May 17, 2012, available: <<http://www.state.gov/t/avc/rls/183335.htm>>.

⁵ “Russia, US Can Make INF Missiles In 2-4 Yrs, If Need Be – Analyst,” *ITAR-TASS*, February 20, 2010, available at: <<http://wnc.dialog.com/>>.

⁶ U.S. DUSD James Miller, Letter to the Honorable Michael R. Turner Chairman Subcommittee on Strategic Forces Committee on Armed Services U.S. House of Representatives, August 3, 2012, p.1.

⁷ “Annex on Notifications to the Protocol to the Treaty Between the United States of America and the Russian Federation on Measures for the Further Reduction and Limitation of Strategic Offensive Arms,” available at: <<http://www.state.gov/documents/organization/141294.pdf>>: “FIVE ARMS,” p.10, available at: <<http://www.state.gov/documents/organization/141294.pdf>>.

⁸ Miller, Letter to the Honorable Michael R. Turner Chairman Subcommittee on Strategic Forces Committee on Armed Services U.S. House of Representatives, op. cit. p.1.

⁹ Stephen J. Blank, *Towards A New Russia Policy*, U.S. Army Strategic Studies Institute, February 2008, p. 44, available at: <<http://www.scribd.com/doc/4871316/TOWARDS-A-NEW-RUSSIA-POLICY>>.: Jane M.O. Sharp, “Russia and America: Is Another Arms Race Afoot?,” November 7, 2007, available at: <http://web.mit.edu/cis/editorspick_sharp07_audit.html>.: “Soviet-U.S. INF Treaty A Relic Of Cold War - Ivanov (Part 2),” *Interfax*, May 23, 2007, available at: <<http://wnc.dialog.com/>>.

¹⁰ “Russia may unilaterally quit INF Treaty - General Staff,” *RIA Novosti*, February 2, 2007, available at: <<http://en.rian.ru/russia/20070215/60795303.html>>.

¹¹ “Putin threatens withdrawal from cold war nuclear treaty,” *The Guardian*, October 12, 2007, available at: <<http://www.guardian.co.uk/world/2007/oct/12/russia.usa1>>.

¹² “Medium-range Missiles Could Re-appear In Strategic Missile Forces' Arsenal,” *Agentstvo Voyennykh Novostey (Internet Version-WWW)*, February 19, 2007, available at: <<http://wnc.dialog.com/>>.

¹³ Mark B. Schneider, “Russian Violations of Its Arms Control Obligations,” *Comparative Strategy*, September 2012, p. 341, available at: <<http://www.tandfonline.com/doi/abs/10.1080/01495933.2012.711115#preview>>.

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