



# Russian Anti-Satellite Technologies as a Response to the US Ballistic Missile Defense System

**OE Watch Commentary:** The US withdrawal from the Anti-Ballistic Missile Treaty (ABM Treaty) in 2001, recent withdrawal from the Intermediate-Range Nuclear Forces Treaty (INF Treaty), and release of the Ballistic Missile Defense Review (BMDR) have aroused Russian fears about the US developing capabilities to eventually overcome Russia's nuclear deterrent. A key fear, as described in the accompanying excerpted article from *Moskovsky Komsomolets*, is that the US will eventually field a directed energy (laser) weapon capable of targeting a ballistic missile. Although the Russians believe there is little they can do to prevent the fielding of such a system, they are intending to do the next best thing, blind or destroy the space-based sensors required to attain the targeting data necessary to hit an intercontinental ballistic missile. These space-based sensors and their associated communications are deemed to be the weak link in any ballistic missile defense system. The accompanying excerpted article from *Svobodnaya Pressa* discusses the testing of a missile of Russia's forthcoming A-235 Nudol ballistic missile defense system for the protection of Moscow and surrounding areas. Although the A-235 is primarily designed to destroy incoming ballistic missiles, the characteristics required to do so also provide the A-235 an offensive capability to target satellites. **End OE Watch Commentary (Bartles)**

*“It has been branded a killer not only of satellites but of intercontinental missiles.”*

**Source:** Sergey Valchenko, “Ракета-«убийца спутников» станет ответом на американскую ППО (A ‘Satellite-Killer’ Missile Will Be the Response to American Missile Defenses),” *Moskovsky Komsomolets*, 3 February 2019. <https://www.mk.ru/politics/2019/02/03/raketaubiyca-sputnikov-stanet-otvetom-na-amerikanskuyu-pro.html>

*On 2 February President Vladimir Putin articulated a number of military-technical actions which are to be a fitting response to Washington's torpedoing the INF Treaty and also plans to put combat systems into space...The threat from space is perfectly real. The Pentagon recently announced the possibility of the deployment of strike arms in space in its 108-page Ballistic Missile Defense Review. Specifically, it notes that the American military will estimate the timeframe and cost of the potential building of a satellite fleet for the destruction of missiles in their launch phase.*

*The danger of the deployment of combat satellites in space is clear. The United States hopes with these to destroy Russian strategic retaliatory-strike or launch-on-warning missiles. Having acquired a “space sword” of laser or particle-beam weapons, the United States could come to believe in impunity. In this case it could be tempted to deliver a first strike with nuclear missiles or defend itself against our retaliatory strike. This would lessen the role of the nuclear-deterrence factor.*

*Of course, such preparations cannot be ignored...*



Russian Transport and reloading vehicle on the chassis of the MAZ-547A for long-range intercept missiles 51T6 as part of the Amur A-135 anti-missile defense complex.

Source: By Mil.ru, CC BY 4.0, <https://commons.wikimedia.org/w/index.php?curid=66165418>.

**Source:** Viktor Sokirko, “Разведка доложила поздно: США «засекли» убийцу своих спутников спустя 3 года (Late Intelligence: US ‘Pinpoints’ Killer of Its Satellites Three Years After the Event),” *Svobodnaya Pressa*, 20 January 2019. <https://svpressa.ru/war21/article/222182/>

*Information has been disclosed...on the development by Russia of a variety of directed-energy and ground-based antisatellite technologies...Russia is conducting experimental launches of satellites that perform complex operations in orbit to enhance their antisatellite potential... This most likely relates to the Nudol missile defense system, which is intended to repulse a nuclear strike at the distant approaches and is being deployed not only on the ground but also in space. It has been branded a killer not only of satellites but of intercontinental missiles... Its testing is close to completion, and it will be incorporated in Moscow's air and missile defense system in the foreseeable future, and subsequently also in the air and missile defense of other strategic objectives on Russian territory. A system which “lay dormant” for a considerable length of time has acquired a real profile and will be ready for use very soon.*

*The A-235 system has a predecessor -- the A-135 Amur missile defense system which even now forms part of Moscow's “air shield” and is designed to repulse a limited nuclear strike on the Russian capital and the central industrial region. Despite its capabilities it is to some extent outdated, and it is partially backed up by the S-300 surface-to-air missile system -- and now the S-400 SAM system, too -- so upgrading of the missile defense system has long been overdue...the A-325 system covered a distance of 3,500 kilometers in 17 minutes and reached its target. The tests, that is to say, can be considered successful. It is not known for certain exactly what missile this was, but in terms of specifications and performance characteristics in all probability it surpasses the 53T6 interceptor missile of the Amur system, which is capable of intercepting ballistic missiles and their warheads traveling at up to 6-7 kilometers per second at altitudes ranging from 5 kilometers to the borders of near space...*