Avangard

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LAVANGARD

About

- Avangard is a nuclear powered hypersonic boost glide vehicle (HGV) developed by the Russian Federation.
- It was developed as part of the top secret Project 4202 and was codenamed Yu-71.
- It was one of six "nextgeneration" weapons described by Russian President Vladimir Putin in a March 2018 speech.

Features

- It has a range of more than 6,000 kilometers, weighs approximately 2,000 kg, and can carry nuclear or conventional payloads.
- It is carried by an intercontinental ballistic missile (ICBM).
- It has a "short wedge design" that does not include a separate propulsion system, relying on gravity and its aerodynamic properties to maintain speed after initial thrust.

Working

- The launch vehicle carries the heavy payload approximately 100 kilometers (62 miles) into the lower altitude of the orbit before releasing it.
- It then switches to "cruise mode" before re-entering the atmosphere and accelerating to a purported supersonic speed of up to Mach 27.
- It is said to be able to maneuver at such speeds and constantly change trajectory, making interception very difficult.

