

Burevestnik Missile

By IASToppers | 2023-10-09 15:35:00



Burevestnik Missile

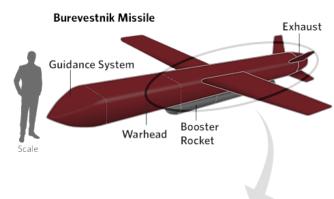
Russia has recently announced a successful test of the 9M730 Burevestnik nuclear-powered cruise missile.

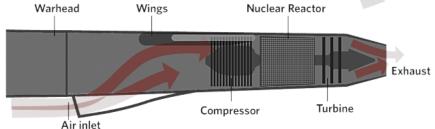


Russia's Nuclear-Powered Cruise Missile

The Russian Burevestnik missile is largely shrouded in secrecy. This diagram, based on imagery released by the Russian Ministry of Defense, represents only a possible configuration.

The Burevestnik cruise missile — known in Russia as the 9M730 or by NATO as the SSC-X-9 Skyfall — uses a miniature nuclear reactor as its power source to provide unlimited range. This means that the missile could carry nuclear or conventional warheads to any target on the globe, maneuvering to avoid missile defenses along the way.





The nuclear reactor powers an electric motor that drives a turbine. This turbine draws in air which is then compressed and pushed out of the missile for propulsion. Airflow over the reactor's elements prevents it from overheating. The nuclear-powered propulsion system is activated only after the missile achieve sufficient speed following launch assisted by a liquid-fueled rocket booster.

Copyright Stratfor 2019

[ref-stratfor]

About the 9M730 Burevestnik Missile:

- 9M730 Burevestnik is a **nuclear-powered cruise missile** capable of carrying **nuclear warheads**.
- It was one of six Russian "super weapons" that boasts an unlimited range when its nuclear reactor activates.
- Also known as SSC-X-9 Skyfall by NATO, the Burevestnik missile is equipped with a small-sized nuclear power unit featuring a solid-fuelled booster engine.
- The missile begins its flight from an inclined launcher with the assistance of a detachable rocket booster.
- It contains a **ramjet engine**, which differs from **conventional propulsion systems** for nuclear weapons as it generates **radioactive exhaust** throughout its operation.
 - A ramjet, is a form of airbreathing jet engine that uses the forward motion of the engine to take in air for combustion that produces jet thrust.
- It is capable of launching attacks from unexpected directions and can maintain a nearindefinite loiter time, allowing for extended operations.