

## India test fires short-range nuclear-capable ballistic missile

*The Prithvi-II tactical surface-to-surface short-range ballistic missile was test fired at night on June 27*

*By Franz-Stefan Gady*

India's Strategic Forces Command (SFC) has test launched a short-range nuclear capable ballistic missile at night as part of its annual training cycle to test the combat readiness of the Indian Army's missile forces.

The Prithvi-II tactical surface-to-surface short-range ballistic missile was test fired from the Integrated Test Range (ITR) on Dr. Abdul Kalam Island in the Bay of Bengal off the coast of Odisha at nighttime on June 27.

The night-time user trial was overseen by the SFC and the defense ministry's Defense Research and Development Organization (DRDO). "It was a routine trial," an Indian military source was quoted as saying by the *Times of India*. All test objectives were reportedly met.

The missile was randomly selected from the production stock. During the test, the missile's entire trajectory was tracked via radars and electro-optical systems. "The missile trajectory was tracked with the help of radars electro-optical tracking systems and telemetry stations by the DRDO along the coast of Odisha," according to a source.

A Prithvi-II was last test fired from the ITR on Dr. Abbdul Kalam Island in February 2018. The missile was also test launched in November 2016 and June 2017.

Prithvi-II is a single-state, liquid-fueled short-range ballistic missile, developed by DRDO in the 1990s and early 2000s under the so-called Integrated Guided Missile Development Program. It was first introduced into service in 2003. The missile has an operational range of around 350 kilometers and can alternatively be armed with 500 to 1,000 kilogram conventional or nuclear warheads.

Earlier this month, DRDO test fired an anti-ship variant of the BrahMos supersonic cruise missile at the ITR. The BrahMos is a derivative of the Russian-made P-800 Oniks over-the-horizon supersonic anti-ship cruise missile and has an estimated range between 300 to 400 kilometers. It is considered to be one of the world's fastest cruise missiles currently deployed.

A test of a BrahMos surface-to-surface variant took place in April of this year at Car Nicobar Island, the northernmost of the Nicobar Islands.

In the same month, DRDO conducted the sixth flight test of the nuclear-capable Nirbhay cruise missile, the country's first indigenously designed and developed long-range cruise missile at ITR.

"The Nirbhay is a subsonic long-range land attack cruise missile that can be armed with a 200-300-kilogram warhead," I explained. "The nuclear-capable, solid fuel, missile can reportedly reach top speeds of 0.6-0.7 Mach and can strike land targets at a distance of up to 1,000 kilometers."

India maintains a nuclear warfighting doctrine based on credible minimum deterrence.

<https://thediplomat.com/2019/06/india-test-fires-short-range-nuclear-capable-ballistic-missile/>



## **Nuclear-capable missile Prithvi II successfully test-fired**

Balasore (Odisha): India successfully test-fired indigenously developed nuclear-capable missile Prithvi-II on Thursday night as part of a user trial by the Army from a test range off the Odisha coast.

The trial of the surface-to-surface missile, which has a strike range of 350km, was carried out from a mobile launcher from Launch Complex-III of the Integrated Test Range (ITR) at Chandipur, near here, at around 8.30pm, sources said.

"It was a routine trial," a source said.

Prithvi-II was also successfully test-fired at night on February 21, 2018 from the ITR at Chandipur.

The missile is capable of carrying 500/100 kg of warheads and is powered by liquid propulsion twin engines. The state-of-the-art missile uses an advanced inertial guidance system with a maneuvering trajectory to hit its target, the sources said.

The missile was randomly chosen from the production stock and the entire launch activity was carried out by the Strategic Forces Command (SFC) of the Army and monitored by the scientists of the Defence Research Development Organisation (DRDO) as part of a training exercise, they added.

"The missile trajectory was tracked with the help of radars, electro-optical tracking systems and telemetry stations by the DRDO along the coast of Odisha," a source said.

The down range teams on board a ship deployed near the designated impact point in the Bay of Bengal monitored the terminal events and splashed down, he added.

On November 21, 2016, two missiles were successfully test-fired in the salvo mode from the same base.

Inducted into the armory of the Indian defence forces in 2003, the nine-metre-tall, single-stage liquid-fuelled Prithvi is the first missile to have been developed by the DRDO under the Integrated Guided Missile Development Programme (IGMDP).

<https://timesofindia.indiatimes.com/india/nuclear-capable-missile-prithvi-ii-successfully-test-fired/articleshow/69979549.cms>