

Did DRDO secretly test b05 'Sagarika' slbm recently?

The Sagarika (K-15, B05) missile is a 700 km ranged Submarine Launched Ballistic Missile (SLBM). It is reportedly based on the Prithvi design. The program started in 1992 and was originally part of a program that would adapt a ramjet engine. Developed by the DRDO in 2007, it tested the Sagarika on several occasions from a submersible pontoon launcher. It was tested again in February of 2008 from another pontoon, simulating the environment of a submarine. Its final trial was on January 27, 2013 as it successfully hit a predetermined target from an underwater battery. It typically carries warhead of around 500 kg, and uses solid fuel.

India's INS Arihant nuclear submarine is equipped with a B-O5 Submarine Launched Strategic Missile (SLBM) capable of hitting targets with nuclear warheads at a range of 650 km is fully operational. Defence Minister, Nirmala Sitharaman made a formal announcement during the annual award ceremony of the Defence Research Development Organisation in New Delhi on Monday (14-May-2018). India has already deployed the submarine-launched version of the B05 at INS Arihant. Indian scientists are currently in the process of developing the land version of the missile. It is an indigenous missile with several innovative designs and a unique mechanism. Numerous critical technologies were proved in the successful trials, which paved the way for developing other long-range strategic missiles and has the potential to be launched from submarine, ship, and land.

It is evident from defence minister's statement that the "Sagarika" had indeed undergone a series of secret testing before it was operationalised by the navy, and during this crucial period complete radio silence was maintained.

Strategic implications

A nuclear armed Sagarika missile deployed on a submarine would complete India's nuclear triad. The only submarine capable of being deployed with Sagarika missiles is the INS Arihant. Though India has leased nuclear powered attack submarines in the past, INS Arihant is India's first indigenously built nuke submarine.



Reportedly, the Arihant could carry up to 12 Sagarika missiles as well as torpedoes and submarine launched cruise missiles. This would allow India's submarine to place a nuclear strike near a foreign powers coastline to deter or retaliate against that power.

However, this would require a certain amount of risk from the submarine due to the short range of the Sagarika. The proximity of the submarine to the shore could severely limit its manoeuvring capability in the event it was discovered. Furthermore, there is no indication that the Arihant is currently carrying Sagarikas, or that the Sagarika has been produced in any quantity other than for test flights. To counter the above scenario,

defence scientists at DRDO have also been testing longer-range K-series submarine-launched strategic missiles for the past few years. The long range (3,500 kilometres) K-4 missiles have so far been tested three times successfully from underwater pontoons, but the last test from a pontoon in December 2017 failed as the missile did not activate properly during the test. India has also started working on the K-5, which has a range of 5,000 kilometres, as well as the K-6, with its range of up to 6,000 km, for nuclear-powered submarines.

<http://www.indiandefensenews.in/2018/05/did-drdo-secretly-test-b05-sagarika.html>

INDIA TODAY

Fri, 18 May, 2018

DEFN-DRDO

ITR Chandipur bags top DRDO awards for two consecutive years Balasore (Odisha) May 16 (PTI) The Integrated Test Range (ITR), the premier DRDO laboratory at Chandipur in Odishas Balasore district, has been awarded the prestigious Silicon Trophy for the year 2016 as the best Technological laboratory of DRDO, an official statement said today.

It has also bagged the "Agni Award for Excellence in Self Reliance" for the year 2017. The Chandipur ITR is the first laboratory of the Defence Research and Development Organisation (DRDO) to get such a recognition back to back for two consecutive years, the statement said. Defence Minister Nirmala Sitharaman on May 14 presented the trophy and certificates for the awards to Dr B K Das, Outstanding Scientist & Director, ITR in New Delhi.

"This achievement has become possible due the hard work, dedication, round the clock service and relentless efforts by the scientists, technical officers & staff, service officers, officers and staff of admin and allied cadres, members of all associations and unions and service & DSC personnel of all ranks," Das said. He specially appreciated and thanked the family members of ITR employees for their constant support without which this could not have been possible. Starting from a barren land in 1982, the Chandipur ITR has reached the top of the pillar and emerged as a World Class Test Range that has not only undertaken Test and Evaluation of Indian defence systems but also earned accolades from Foreign agencies, Das said.

<https://www.indiatoday.in/pti-feed/story/defn-drdo-1234760-2018-05-16>

The Telegraph

Fri, 18 May, 2018

Twin awards for ITR

By Sibdas Kundu

The Integrated Test Range (ITR) here has bagged two awards for its success in becoming a self-reliant



unit on the National Technology Day. The test range, a unit of the Defence Research and Development Organisation (DRDO), won the Silicon Trophy after being adjudged as its best laboratory for 2016 and the Agni Excellence Award for Self-Reliance for 2017.

The awards were given away during the DRDO award ceremony on Monday. ITR director Binay Kumar Das received the awards from defence minister Nirmala Sitharaman at DRDO Bhavan, Delhi. The test range is one of the DRDO's 52 laboratories, established in the late nineties. Das said: "These two awards are the most coveted. This year, the award ceremony was held for two years (2016 and 2017) as it could not be held last year." "We won these awards

mainly because of our consistent performance and providing world-class ranges for validation of various

ranges of missiles. This range is not only established with the country's own technological resources, but the indigenous lab has also proven itself as one of the best in the world," he said.

"This a proud moment for all of us. These awards add more feathers to our cap and inspire and encourage our staff members to do better. This rare feat of winning awards for two straight years was made possible because of the sheer hard work, sincerity and dedication of all of our men and women," he said. The ITR is a dedicated missile test site for ranges up to 5,000km. Prithvi and Agni I-V ballistic missiles, Akash and Trishul surface-to-air missiles, the Nag anti-tank missile, and Advanced Air Defence ballistic missile interceptors have all been tested here.

<https://www.telegraphindia.com/states/odisha/twin-awards-for-itr-230980>