In a first, air-launched BrahMos missile test-fired

On target: The BrahMos missile in flight. Special Arrangement

In a first, India on Wednesday successfully test-fired the air-launched version of the BrahMos supersonic cruise missile from an IAF Su-30MKI aircraft.

BrahMos, which is multi-platform, multi-mission missile, is now capable of being launched from land, sea and air and completes the tactical cruise missile triad.

"The air-launched BrahMos missile is a 2.5 ton supersonic air-to-surface cruise missile with ranges of more than 400 km. The IAF is the first Air Force in the world to have successfully fired an airlaunched 2.8 Mach surface attack missile of this category," the IAF said.

The missile was gravity-dropped from the Su-30MKI from its fuselage, and the two stage engine fired up and propelled towards the intended target, a ship, in the Bay of Bengal.

Heaviest weapon

BrahMos weighing 2.5 ton is the heaviest weapon to be deployed on the Su-30 fighter aircraft which was modified by the Hindustan Aeronautics Limited (HAL) to carry the weapon.

"This success not only bolsters the combat effectiveness of IAF but also demonstrates the capabilities of indigenous onboard avionics with innovative algorithms developed by DRDO," said Dr. G. Satheesh Reddy, Scientific Advisor to Defence Minister and Director General, Missiles and Strategic Systems.

The integration of the missile on the aircraft was a complex process involving mechanical, electrical and software modifications on the aircraft. In fact, the test launch had been delayed by the complexities in the integration. The software development of the aircraft was undertaken by the IAF engineers. "One of the major challenges overcome by the scientists of the Research Centre Imarat, DRDO in the missile development was optimisation of transfer alignment of the inertial sensors of the missile," the IAF said.

Original range

The land and sea variants of BrahMos are already operational with the Army and the Navy. The original range was 290 km in line with the limitations of the Missile Technology Control Regime. After India joined the grouping in June 2016, the range was extended to 450 km and would be further extended to 600 km.

BrahMos is a joint venture with Russia and named after the Brahmaputra and Moskva rivers. The development trials of an anti-shipping variant began in 2003 and combat trials in 2005.

The significance of the development is that in an increasingly complex air defence environment, the missile gives long stand-off distance to the IAF to strike targets deep inside the enemy territory and get away quickly.

END

Downloaded from crackIAS.com

[©] Zuccess App by crackIAS.com