पंजाब केसरी

Tue, 16 April 2019

स्वदेशी क्रूज मिसाइल 'निर्भय' का सफल परीक्षण

■ पाकिस्तान और चीन सहित कई देश जद में

बालासोर (ओडिशा), 15 अप्रैल (प.स.): भारत ने पहली बार देश में ही डिजाइन की गई और फिर विकसित की गई लंबी दूरी की सब-सोनिक क्रूज मिसाइल 'निर्भय' का यहां ओडिशा के एक परीक्षण केंद्र से सोमवार को सफल परीक्षण किया। रक्षा अनुसंधान एवं विकास संगठन (डी.आर.डी.ओ.) के सूत्रों ने बताया कि इस अत्याधुनिक मिसाइल का इस्तेमाल कहीं से भी किया जाता है। दोपहर 11.44 बजे चांदीपुर के इंटिग्रेटेड टैस्ट रेंज (आई.टी.आर.) के प्रक्षेपण परिसर-3 से इसका प्रक्षेपण किया गया।

यह मिसाइल 300 किलोग्राम तक के परमाणु वारहैड को अपने साथ ले जा सकती है। इस मिसाइल से भारत की सैन्य ताकत को मजबूती मिलेगी। पाकिस्तान, चीन समेत कई देश इस मिसाइल की जद में हैं। यह मिसाइल कुछ सैकेंड में ही दुश्मन देशों के किसी भी इलाके को नेस्तनाबूद करने में सक्षम है।

उन्होंने बताया कि यह प्रक्षेपण सफल रहा। जांच के दौरान इस मिशन के सारे उद्देश्य पूरे हो गए। इस मिसाइल में एक इंजन है। इससे पहले 'निर्भय' क्रूज मिसाइल का अंतिम सफल परीक्षण 7 नवम्बर, 2017 को किया गया था।

चांदीपुर : डी.आर.डी.ओ. निर्भय मिसाइल का सफल प्रक्षेपण करते हुए।

1000 कि.मी. तक करेगी मार

निर्भय 2 चरण वाली, 6 मीटर लंबी और 0.52 मीटर चौड़ी मिसाइल है। यह मिसाइल 0.6 से लेकर 0.7 मैक की गति से उड़ सकती है। इसका प्रक्षेपण वजन अधिकतम 1500 किलोग्राम है जो 1000 किलोमीटर तक मार कर सकती है। इसमें एडवांस सिस्टम लैबोरेटरी द्वारा विकसित ठोस रॉकेट मोटर बूस्टर का प्रयोग किया गया है जिससे मिसाइल को ईंधन मिलता है।

2 चरणों में भरती है उड़ान

यह मिसाइल 2 चरणों में उड़ान भरती है। पहली बार में यह पारंपरिक रॉकेट की तरह लंबवत आकाश में जाती है, फिर दूसरे चरण में क्षैतिज उड़ान भरने के लिए 90 डिग्री का मोड़ लेती है। राडार से बचने के लिए यह मिसाइल धरती से मात्र कुछ मीटर की ऊंचाई से उड़कर दुश्मन के ठिकाने को नष्ट कर देती है।

The Indian EXPRESS

Tue, 16 April 2019

DRDO successfully test-fires sub-sonic cruise missile Nirbhay

The last successful trial of 'Nirbhay' cruise missile was conducted on November 7, 2017

In a major boost for defence, India on Monday successfully test-fired its first Sub-sonic cruise missile, Nirbhay. The launch was conducted from a test range in Odisha at 11.44 am.

The missile, which can be deployed from multiple platforms, was launched by the Defence Research and Development Organisation (DRDO) from complex-3 of the Integrated Test Range (ITR) at Chandipur, PTI reported. Describing the trial "successful", DRDO said the missile, which is capable of loitering and cruising at 0.7 Mach at altitude as low as 100 meters, covered the designated target range in 42 minutes and 23 seconds.

The test flight achieved all the objectives from lift off till the final splash, DRDO said. "The missile majestically cruised and covered its given range," officials at DRDO were quoted as saying by PTI. Nirbhay was tracked with the help of ground-based radars and other parameters were monitored by indigenous telemetry stations developed by DRDO. The missile test was conducted in a phased manner. The last successful trial of 'Nirbhay' cruise missile was conducted on November 7, 2017.

https://indianexpress.com/article/india/drdo-nirbhay-army-cruise-missile-odisha-5676752/

Business Standard

Tue, 16 April 2019

With Nirbhay test and Coast Guard patrol vessel, L&T issues reminder

AJAI SHUKLA
New Delhi, 15 April

(*Left*) DRDO test-fires indigenously designed & developed long range sub-sonic cruise missile Nirbhay from the Integrated Test Range in Odisha; (*Above*) Army chief General Bipin Rawat commissions Indian Coast Guard Ship Veera at Visakhapatnam PHOTOS: AJAI SHUKLA

Larsen & Toubro's (L&T's) defence business scored twin successes on Monday, with a successful test of the long-range Nirbhay cruise missile in Odisha, followed by the ahead-of-time delivery of a 2,140-tonne Offshore Patrol Vessel (OPV) to the Coast Guard (CG) at Visakhapatnam.

The Nirbhay test — its sixth developmental flight trial — was crucial, with three of its five previous firings having been unsuccessful to varying degrees. This test, however, was a complete success, says the Defence Research & Development Organisation (DRDO), which manages the Nirbhay project.

L&T has designed the Nirbhay's airframe, fuel tanks and foldable wings, as well as the entire launch system. Other private sector firms also have lesser roles. The Gas Turbine Research Establishment, a DRDO laboratory, is designing the Nirbhay's engine. Launched from the Integrated Test Range in Chandipur, Odisha, the Nirbhay was required to skim the sea, just metres above the waves, and accurately navigate its way past a series of designated "way points", spread out over 1,000 kilometres.

This would allow the Nirbhay to follow a low-level path, undetected by enemy radar, and strike a target 1,000 kilometres away with extreme precision. Stealth is essential because the slow-flying missile is vulnerable to being shot down by fighter aircraft, if detected by enemy radar. "The missile took off vertically, turning horizontally into [the] desired direction, [the] booster separated, wing deployed, engine started, [and the missile] cruised [past] all the intended waypoints. The missile demonstrated its sea-skimming capability to cruise at very low altitudes," said a defence ministry (MoD) release.

The defence ministry says a chain of radars, electro-optical and telemetry systems along the eastern coast tracked and validated the Nirbay's flight.

More flight-testing lies ahead for the Nirbhay, which will eventually be fired from land, sea and airborne platforms.

Offshore patrol vessel delivered

Army chief General Bipin Rawat commissioned Indian Coast Guard Ship (ICGS) Veera at Visakhapatnam, the third of seven OPVs that L&T is building at Kathupalli shipyard in Tamil Nadu.

L&T won the ₹1,304-crore CG contract to build seven OPVs in March, 2015. All three vessels delivered so far have been ahead of schedule.

These OPVs are designed in-house, at L&T's warship design centre at Manapakkam, Chennai, making it the first significant warship fully designed and built in private sector facilities. L&T is pushing hard to be also allowed to design and build larger warships like corvettes, frigates, and destroyers, but the MoD has so far given those contracts "on nomination" to the four public sector defence shipyards: Mazagon Dock, Mumbai; Garden Reach Shipbuilders & Engineers, Kolkata; Goa Shipyard Ltd and Hindustry Shipyard Ltd, Visakhapatnam. In addition, Cochin Shipyard Ltd, a state enterprise, is being "nominated" to build aircraft carriers for the navy.

L&T is also pushing for the Project 75-I contract to build six conventional submarines, based on foreign technology, which the MoD proposes to tender under the strategic partner (SP) category. For this, L&T has an impressive track record, having built the hulls of India's nuclear submarines at its Hazira facility.

Says Jayant Patil, who heads L&T's heavy engineering and defence business: "We have demonstrated our ability to deliver high-tech platforms on, or ahead of, time and within budget. We remain optimistic that the MoD will provide us a level playing field to enable us to play a larger role in defence."

The 98-metre-long OPVs embark 106 crewmembers, who police India's maritime zone on anti-smuggling and anti-piracy missions of up to 5,000 nautical miles (9,250 kilometres). The vessels can touch 26 knots (50 km per hour) and deploy a 30-millimetre main gun and two 12.7 mm heavy machine guns.

The OPV also embarks a twin-engine helicopter and four high-speed boats for boarding operations. It is also equipped to respond to fires and oil and chemical spills.

THE ECONOMIC TIMES
WWW.ECONOMICTIMES.COM

Tue, 16 April 2019

Sub-sonic cruise missile 'Nirbhay' successfully test-fired

Balasore (Odisha): India on Monday successfully test-fired its first indigenously designed and developed long-range sub-sonic cruise missile 'Nirbhay' from a test range in Odisha.

The state-of-the-art missile, which can be deployed from multiple platforms, was test-fired at 11.44 am from launch complex-3 of the Integrated Test Range (ITR) at Chandipur near here, sources in Defence Research and Development Organisation (DRDO) said. Describing the trial "successful", they said the missile, which is capable of loitering and cruising at 0.7 Mach at altitude as low as 100 metre, covered the designated target range in 42 minutes and 23 seconds.

The flight test achieved all the mission objectives, right from lift off till the final splash, boosting the confidence of all scientists associated with the trial, sources said, adding it has an engine with rocket booster and turbofan/jet. The sophisticated missile took off in a programmed manner and all critical operations like launch phase, booster deployment, engine start, wing deployment and other parameters were demonstrated through autonomous way point navigation.

"The missile majestically cruised and covered its given range," they said, adding that it was tracked with the help of ground-based radars and other parameters were monitored by indigenous telemetry stations developed by DRDO. The last successful trial of 'Nirbhay' cruise missile was conducted on November 7, 2017.

https://economictimes.indiatimes.com/news/defence/india-successfully-test-fires-nirbhay-missile/printarticle/68887068.cms

TIMESNOWNEWS.COM

Tue, 16 April 2019

Serial production of A-SAT missile is government's decision: Former DRDO chief

Former DRDO Director S Christopher told Times Now that serial production of A-SAT missile is something the government will decide upon

By Srinjoy Chowdhury

New Delhi: S Christopher, former DRDO Director-General told Times Now that he is extremely happy how the current DRDO Chairman G Satheesh Reddy and his team completed the successful anti-satellite (A-SAT) missile project in record time and in a short time. He said he is extremely happy how the project brought glory to the country.

"I am happy that S Reddy and his team have taken it forward in a very short time and brought glory to the country. It's a proud moment. Talking about the system, it was a fallout of earlier programs".

When asked if he thinks that weaponisation of ASAT missile is something India should pursue? "We don't have to weaponise in case of a direct hit. However, its government's decision if serial production of these assets are required."

https://www.timesnownews.com/india/article/serial-production-of-a-sat-missile-is-governments-decision-former-drdo-chief/400613