Wed, 07 June, 2017

India to Get Long Range Missile Test Facilities in Indian Ocean

India's Defense Research and Development Organization (DRDO) has got governmental approval to set up the country's land based long-range missile facility at South Andaman's Rutland Island, which is some 200 km from the Strait of Malacca that connects the Indian Ocean to the South China Sea.

New Delhi (Sputnik) — India's National Board of Wildlife cleared the proposal sent by DRDO in 2012 for creating infrastructure facilities for strategic surveillance system at Rutland Island. Facility will have a missile test range for testing of long range missile. "After discussions, considering the strategic importance of the project for the country's defense, the Standing Committee decided to recommend the proposal along with the conditions and mitigation measures prescribed by the State Chief Wildlife Warden," a document released by India's Ministry of Environment and Forests said.

The proposal involves diversion of 49.978 acres forest of which 0.84 hectare falls in the Mahatma Gandhi Marine National Park and 49.138 hectare reserve forest within 10km of the Eco Sensitive Zone.

Currently, Indian scientists test long range missiles from the Odisha coast and are tracked by naval vessels on a trajectory into the Bay of Bengal. Work on technology demonstration vessel for DRDO, which is capable of tracking the full flight of long-range naval missile systems during test firing, has been in progress at the Cochin Shipyard.

On May 16 this year, the Narendra Modi government had also cleared the Indian Navy proposal to expand Shibpur naval air station in the northern part of the Andaman Island. Indian armed forces operate Dornier, Mi-8, Chetak aircraft from NAS Shibpur airfield, which after the expansion would be approximately 100 hectares and serve larger aircraft. The Indian armed forces have been expanding their strength at strategically important Andaman and Nicobar Islands since long. In March this year, the Indian Navy had commissioned the first of its eight amphibious landing craft at tri-service command headquarters in Port Blair. India also has an IAF base at Car Nicobar, named Carnic air force base and naval base Kardip, located on Camorta Island, a part of the Nancowry group of islands.

Wed, 07 June, 2017

Wildlife Board Okays Andamans' Rutland Island for DRDO's missile testing project

By Anubhuti Vishnoi

NEW DELHI: The country's long-range missile test facility at South Andamans' Rutland Island has finally secured the clearance of the National Board of Wildlife, which has been held up since 2012. The Standing Committee of the National Board of Wildlife in a meeting held on May 15 approved the project, "considering the strategic importance of the project for country's defence".

The proposal involves diversion of 49.978 acres forest of which 0.84 ha falls in the Mahatma Gandhi Marine National Park and 49.138 ha reserve forest within 10km of the Eco Sensitive Zone. The island is very rich in marine life and was once home to the indigenous Andamanese group 'Jangil' or Rutland Jarawa. DRDO has

been struggling to get its long range missile test facility since 2012 when the proposal was moved across the government.

However, it has been consistently stalled due to objections by the environment ministry. The Proposal for Wildlife clearance for creation of Infrastructure Facilities for Strategic Surveillance System at Rutland Island had been moved by DRDO. Rutland Island is vital to DRDO's long-term plans to have a comprehensive testing facility to identify and track long-range missile tests.

The island is located at an ideal distance from the mainland where tests are typically launched from. As of now, long-range missile tests are being carried out from the Odisha coast and are tracked by naval vessels on a trajectory into the Bay of Bengal. Most of the long-range tests for missiles like Agni IV and V have to be tracked over sea, with specialised vessels noting the 'hit zone' into the water.

DRDO requires a land-based test area as well to accurately track its longrange missiles, with the island in the Andamans being ideally located due to its distance from mainland. DRDO is also looking at setting up tracking stations along the Andaman Islands to track incoming test missiles. Besides, a special purpose vessel for tracking missile launches is currently under construction at the Vizag based Hindustan Shipyard Limited.

The state Chief Wildlife Warden has recommended the project with conditions such as preparation of a specific marine and terrestrial wildlife conservation plan and installation of essential deflectors and anti-radiation screens around satellite antennas to reduce the impact of radiation on biodiversity in the proposed area. It has also been specified that minimum number of vehicles should be used inside Rutland Island during constructional and operational phase of the project.

Vessels/boats used for construction should use the approved route for navigation with larger vessels to enter into the National Park only during high tide. The project authority has also been asked to take necessary permission from the Chief Wild Life Warden while entering into waters of Marine National Park while approaching Rutland Island.

No forest material of fire wood is to be collected from forest area and no effluent or domestic sewage (liquid or solid waste) shall be disposed into the sea or nearby forest area.

Jane's 360

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Indian DRDO-designed QRSAM successfully tested

By Rahul Bedi

India's state-owned Defence Research and Development Organisation (DRDO) tested the indigenously designed quick-reaction surface-to-air missile (QRSAM) system on 4 June from the Integrated Test Range (ITR) in Chandipur on the country's east coast.

Official sources said that the system, which is being developed for the Indian Army (IA) in tandem with public sector companies Bharat Dynamics Limited and Bharat Electronics Limited, successfully engaged an aerial target during the developmental trials.

They said the missile fired by the QRSAM system, which uses a solid-fuel propellant and has a stated strike range of 25-30 km, was launched from a truck-mounted canister. The range to which the missile was tested was unclear, however, as the DRDO spokesman declined to comment on the test-firing.

Wed, 07 June, 2017

Scientist designs revolutionary bullet-proof jacket for armed forces, India will save Rs 20,000 crore every year

New Delhi: The empowered committee of the Ministry of Defence has given its go-ahead to the use of a bullet-proof jacket designed by Bengali scientist and professor Shantanu Bhowmick.

The ultra lightweight, thermoplastic jacket can be manufactured completely through indigenous technology. Notably, this is the first time in 70 years that the Indian Army will have bullet-proof jacket manufactured completely in India.

According to *The Times of India*, Bhowmick, the departmental head of aerospace engineering in Coimbatore's Amrita University, has dedicated this jacket to Netaji Subhas Chandra Bose.

It is made from completely indigenous thermoplastic technology. The report added that its manufacturing will begin once it gets approval from Prime Minister Narendra Modi, who launched the `Make in India` initiative on September 25, 2014, with the primary goal of making India a global manufacturing hub.

The product will be included in the 'Make in India' project, reported the daily.

Bhowmck joined hands with the Defence Research and Development Organization (DRDO) and the Ministry of Defence to design the jacket that will be the first in 70 years to be manufactured in India, said the report.

At present, jackets used by the military and paramilitary forces are being imported from the US and each costs Rs 1.5 lakh. However, Bhowmick's design will cost Rs 50,000 per jacket. This means, it will bring down the defence spending by Rs 20,000 crore annually, reported the daily.

Also, the bullet proof jackets currently being used by Army, Border Security Force, Central Reserve Police Force and police personnel are heavy, weighing between 15 and 18 kilograms. The new version weighs almost eight times less at about just 1.5 kilograms.

It has 20 layers and the carbon fiber in it will enable the jacket to work in 57 degrees Celsius also, reported the *TOI*.

MAIL TODAY

Wed, 07 June, 2017

'Very minor' motor glitch likely to have stopped Agni-II test flight

By Isha Gupta

India, on May 4, test-fired its medium-range nuclear-capable Agni-II missile having a strike range of more than 2,000 kms from an island off the Odisha coast.

A 'very minor' glitch in the motor is likely to have caused problems in the test firing of an Agni-2 missile off the coast of Odisha as the missile could not meet all the desired parameters in the firing done on May 4 last month."Prima facie it appears that there was a minor glitch in the motor of the missile which may have led to the missile not meeting all the desired parameters," defence sources told Mail Today here.

The sources, however, said the detailed reason about the tests are being analysed for finding out the causes in detail behind the test not meeting the full expectations as the missile is already operationalised and in the armed forces.

Agni-II Missile Test-Fired

India, on May 4, test-fired its medium-range nuclear-capable Agni-II missile having a strike range of more than 2,000 kms from an island off the Odisha coast as part of a user trial by the strategic forces command. The test, however, did not meet all the desired parameters which was conducted from a mobile launcher at the Integrated Test Range (ITR) on Abdul Kalam Island, they said.

Agni-II has already been inducted into the services and the test was carried out by the Strategic Forces Command (SFC) as part of a training exercise. The two-stage missile equipped with advanced high accuracy navigation system was propelled by solid rocket propellant system, the sources told Mail Today.

More about the Nuclear-Capable Missile

Agni-II, which has a length of 20 metres, weighs 17 tonnes and can carry a payload of 1000 kg over a distance of 2000 km. It is a part of the Agni series of missiles developed by the DRDO which includes Agni-I (700-km range), Agni-III (3,000 kms), Agni-IV (4,000 kms) and Agni-V (more than 5,000 kms).The last user trial of Agni-II that was conducted on November 9, 2014, from the same base was a success.

From time to time, the SFC carries out tests of missiles in its inventory from different production batches to check the effectiveness of the weapon systems in its stock. The nuclear warhead carrying missiles are mainstay of Indian nuclear 'no first strike policy' and have been developed as reliable as credible weapon systems.