

Excessive-altitude trials of indigenous gun

Pune: The Defence Research and Development Organisation (DRDO) is all set to carry out high altitude (HA) trial of 155 mm 52-calibre advanced towed artillery gun system (ATAGS) in Sikkim next week. ATAGS has been jointly developed by DRDO and the private sector. In September last year, it successfully cleared the desert trials.

A senior DRDO official told TOI on Wednesday, “We will carry out HA trial next week in Sikkim. A team of scientists from Armament Research and Development Establishment (ARDE) and the army team will carry out the trial together. The duration of trial is not yet fixed but it generally goes on for a few weeks.”

DRDO had carried out deserts trials in Rajasthan in September last year and its scientists claimed that the trials achieved the desired results. In fact, ATAGS set a record during desert trials, firing shells to a range of 48km, against the army’s requirement of 40 km, the DRDO sources informed.

“The HA trial is crucial and tough as the gun will have to perform in different weather and geographical conditions. During the trial, a large number of extended range full bore artillery ammunition will be fired from the gun,” a senior DRDO official told TOI over phone from New Delhi on Wednesday.

The Ministry of Defence (MoD) had sanctioned the ATAGS project in September 2012 and DRDO, in collaboration with Bharat Forge and Tata Power, has developed two prototypes of ATAGS. These prototypes underwent maiden structural stability trials in December 2016 at Proof and Experimental Establishment, a government test facility at Balasore in Odisha, the sources added.

<https://kaplanherald.com/2018/01/16/excessive-altitude-trials-of-indigenous-gun/>



Let China hear: Indian Army to test ‘Made in India’ howitzer in Sikkim

Designed to replace the army’s ageing guns, the ATAGS will be inducted once all the field trials are over.

The Indian Army is all set to test the DRDO-made 155 mm 52-calibre advanced towed artillery gun system (ATAGS) in Sikkim. It would be the first high-altitude test of the indigenously-manufactured howitzer.

The gun has been developed by DRDO’s Armament Research and Development Establishment (ARDE) in partnership with Ordnance Factories Board (OFB), Kalyani Group, and Tata Power.

Designed to replace the army’s ageing guns, the ATAGS will be inducted once all the field trials are over.

In September 2017, the ATAGS completed successful desert trials in Rajasthan. The gun performed better than expectations hitting targets approximately 48 kilometres away instead of the expected 40 kilometres.

The high altitude test will be crucial for the gun as it will determine its effectiveness in mountainous areas. It should be noted that the entire stretch of the Indo-China border is mountainous as is the LoC in Jammu and Kashmir.

The utility and need for better howitzers was especially understood during the Kargil War in which the guns proved their effectiveness by assisting Indian troops in capturing heights.

This is why India has been keen on developing and purchasing guns. Besides the ATAGS, the DRDO is also making the Dhanush artillery gun. India has also placed an order of 145 BAE M777 155 mm guns from the United States for US\$ 750 million.

The all-electric ATAGS has a chamber size of 25 litres which helps it fire shells at longer distances than guns of a comparable make. It can fire 3 rounds burst in 15 seconds enabling it to target the enemy before they find shelter. Though heavier than other guns, DRDO ATAGS can be moved at a greater speed and uses a much advanced communication technology.

According to estimates, each gun will cost around Rs.15 crore. The Army needs over 2000 howitzers.

As per reports, the test may be held sometime next week for an unspecified duration.

<https://www.thestatesman.com/india/let-china-hear-indian-army-test-made-india-howitzer-sikkim-1502565777.html>

Business Standard

Tue, 16 Jan, 2018

Defence ministry clears Rs 35.47 bn rifle buy under "fast track" process

It is still unclear whether the remaining 1,77,600 assault rifles needed for frontline infantry would be imported, or manufactured in India with technology transferred by a foreign vendor

By Ajai Shukla

The defence ministry has gone back to the start line in procuring a basic weapon for the army's infantry battalions – the footsoldiers who make up the bulk of the army, defend or capture territory in war and carry out counter-insurgency duties in peace. After an earlier procurement was aborted last year after years of fruitless trials, the defence ministry announced on Tuesday its go-ahead for re-starting the procurement of 72,400 assault rifles and 93,895 carbines, worth an estimated Rs 3,547 crore.

This is a fraction of the one million rifles and carbines that will be needed to re-equip the entire army. However, the ministry said it would “enable the Defence Forces to meet their immediate requirement for the troops deployed on the borders.” The ministry's apex procurement body, the Defence Acquisition Council (DAC), headed by Defence Minister Nirmala Sitharaman, cleared this procurement under the “fast track basis”, which requires a contract to be concluded in less than six months and delivery of weapons within a year of signing the contract.

As this newspaper first reported (November 4, Infantry to get foreign rifles, others to get ‘made in India’), the army – struggling to make do with a strained procurement budget – decided against importing the army's entire requirement of 800,000 assault rifles.

Instead, it would cut costs by importing only 250,000 assault rifles for about Rs 200,000 each; and ask the Defence R&D Organisation (DRDO) and the Ordnance Factory Board (OFB) to design and build the remaining 550,000 rifles in the country. An indigenous rifle, it is estimated, would cost less than half an imported one. On Friday, army chief General Bipin Rawat explained that some high-quality assault rifles would have to be imported in order to “empower the infantry soldier”, who fights eyeball-to-eyeball with the enemy.

It is still unclear whether the remaining 1,77,600 assault rifles needed for frontline infantry would be imported, or manufactured in India with technology transferred by a foreign vendor.

Rawat raised that possibility, stating: “Let us see if this imported weapon can subsequently be manufactured in India also by our own industry.”Meanwhile, the DRDO is continuing perfecting the indigenous INSAS 1C rifle, and the OFB is separately developing another rifle it calls the Ghatak. These weapons are still to pass army trials.

Once these new weapons are introduced, the army will simultaneously juggle two different weapon philosophies. The frontline infantry’s heavy 7.62 x 51 millimetre rifle will be optimised for conventional war, with a longer range and heavier bullets that kill or completely incapacitate enemy soldiers that they strike. These rifles will also be equipped with reflex sights and modern night vision sights.

The indigenous weapons that will arm soldiers other than frontline infantry, will be lighter 5.56 x 45 millimetre weapons, optimised for counter-insurgency operations, with smaller bullets that soldiers can carry in larger numbers.

Tue, 16 Jan, 2018

City-based firm to make advanced fuses for Navy torpedoes

By Vijay Mohan



*DRDO Chairman Dr S Christopher (left) and TBRL Director Dr Manjit Singh (centre) give a sample of fuse for torpedoes to Vikram Sehgal of Micron Systems Private Limited in Chandigarh on Monday.
Tribune photo*

Terminal Ballistics Research Laboratory (TBRL) has developed advanced smart fuses for torpedoes used by the Navy, which will now be commercially produced by a Chandigarh-based private firm.

Christened 'Exploder Mechanism for Heavy Torpedo Varunastra Naval Warhead', the fuse is meant to initiate underwater detonations while preventing inadvertent or accidental detonation during transit. It will replace the existing imported fuses that are at presently being used by the Navy. Varunastra is a heavy anti-submarine torpedo with a warhead of 250 kg and a range of 40 km.

The TBRL, an establishment under the Defence Research and Development Organisation (DRDO), had started work on this project in 2014 and the exploder mechanism is the first-of-its-kind to be produced in the country, a scientist associated with the project said.

“The mechanism is an underwater fusing system designed to initiate the detonation of a torpedo warhead on impact with the target or in the target’s desired proximity,” the scientist said. “It also gives the operators surety that the warhead will detonate only when desired, which provides a higher safety level when kept on board ships or submarines,” he added.

The technology for its production was transferred to Micron Systems Private Limited and the associated documents were received by its managing director Vikram Sehgal from the Chairman, DRDO, and the Secretary, Department of Defence Research and Development, Dr S Christopher during the TBRL’s 57th Raising Day function here today.

<http://www.tribuneindia.com/news/chandigarh/city-based-firm-to-make-advanced-fuses-for-navy-torpedoes/529267.html>