

## **Advanced artillery gun to be ready for user trial by September**

Pune: India's first fully integrated Advanced Towed Artillery Gun System (ATAGS) will be ready for crucial user (army) trials by early September this year, a senior official of the Defence Research and Development Organisation (DRDO) told TOI on Wednesday.

"A team of scientists from Pune-based Armament Research and Development Establishment (ARDE) and army officers from the Corps of Artillery conducted a key user assistant technical trial (UATT) of the gun between May 20 and June 5 at the firing range of Pokhran in Rajasthan. The gun has achieved all desired results during the trial, which is why we are confident of giving the gun for the army's trials," the official added. The gun has achieved critical technical objectives such as accuracy, range, day, night firing and mobility. "We have fired all types of ammunitions. The gun has hit a target at 45km distance. We have tested other technical parameters too," said another senior official involved in the project.

The army and DRDO have already completed desert and high-altitude trials in Rajasthan and Sikkim in the last two years. "The gun has produced excellent results. Our endeavour is to induct the gun in the force by 2020," added the official.

The ATAGS is the first indigenous 155mm/52-calibre towed gun. It is one of the guns in the world having six-round 'automated magazine' that fires in 30 seconds. The gun has all-electric drive, an advantage over traditional hydraulic drives, which are common in other towed guns. The electric drives of the ATAGS provides controls in handling ammunition, opening and closing breech mechanism and ramming the round into firing chamber," said a scientist involved in the project.

The existing 155/mm and 52 calibre guns have three-round magazines, which need to be reloaded manually.

During this exercise maximum burst takes place, which have often resulted in casualties, said defence sources.

<https://timesofindia.indiatimes.com/city/pune/advanced-artillery-gun-to-be-ready-for-user-trial-by-sept/articleshow/69763049.cms>

## **Business Standard**

*Thu, 13 June 2019*

## **India successfully launches new technology demonstrator missile**

India successfully launched a Technology Demonstrator missile vehicle off the coast of Odisha on Wednesday. This missile vehicle is expected to help the Defence Research and Development Organisation (DRDO) prove and develop a number of technologies for futuristic missions.

The test was conducted by the premier defence research agency in presence of Defence Minister Rajnath Singh and Secretary (Defence Production) Ajay Kumar at the test firing range in Balasore.

The missile was launched successfully. Various sensors have been placed on the missile, through which a large number of data has been gathered for various missile subsystems. That data will be

analyzed to validate the critical technologies for the purpose the said vehicle was launched," DRDO sources said.

In the test conducted on Monday, the technology demonstrated missile was launched in air using an Agni-series vessel which lifted it off the ground and then separated from the main missile after reaching a higher altitude.

The Defence Minister also addressed the team of scientists that carried out the test here.

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[https://www.business-standard.com/article/news-ani/india-successfully-launches-new-technology-demonstrator-missile-119061200629\\_1.html](https://www.business-standard.com/article/news-ani/india-successfully-launches-new-technology-demonstrator-missile-119061200629_1.html)

## THE TIMES OF INDIA

*Fri, 14 June 2019*

# India set to join heavyweight torpedo club

*By Ch Sushil Rao*

Hyderabad: India's underwater weaponry is set to get more firepower with the Navy deciding to induct the indigenously developed heavyweight torpedo "Varunastra" into its arsenal. This will put India in a group of only eight countries that have the capability to manufacture heavyweight torpedoes.

The weapon has been developed by the Naval Science and Technology Laboratory (NTSL), Visakhapatnam.

Bharat Dynamics Limited (BDL) in Hyderabad has signed a contract worth Rs 1,187 crore to manufacture the torpedoes to arm both warships and submarines. BDL said on Thursday manufacturing would take place at its Visakhapatnam unit in collaboration with DRDO. A contract for manufacture was signed by N P Diwakar, director (technical), BDL, and Nidhi Chhibber, joint secretary and acquisition manager (maritime and systems), ministry of defence, in New Delhi on Tuesday.

"The heavyweight torpedo, or Varunastra, is a ship-launched, electrically-propelled underwater weapon equipped with one of the most advanced automatic and remote-controlled guidance systems. The weapon system uses its own intelligence in tracing the target, " BDL said in an official note on Thursday. Varunastra is considered to be 95% indigenous. BDL, which was involved in the production of the torpedo, had earlier delivered it to the Indian Navy in 2016 which evaluated it. Subsequently, a decision was taken to order production.

Varunastra can hit stealth submarines underwater. The ship-launched missiles can also be launched from ashore. It is seven to eight metres long, weighs 1,500 kg and has a diameter of 533 mm. The anti-submarine electric torpedo when fired can travel at 40 knots, or 74 kmph. The operational range is 40 km and it can carry a warhead weighing 250 kg. According to DRDO, it can be launched from ships and submarines.

India's intends also to sell the heavyweight torpedo to friendly nations

<https://timesofindia.indiatimes.com/india/india-set-to-join-heavyweight-torpedo-club/articleshow/69780343.cms>

Fri, 14 June 2019

## **After Ex-ISRO Chief says UPA 2 blocked Chandrayaan-2, DRDO Scientist alleges Mission Shakti was similarly blocked**

*By Apoorva Rao*

- *Former ISRO chief G Madhavan Nair claimed on Thursday that the UPA II government delayed Chandrayaan-2 for Mars mission owing to political considerations*
- *Now, former DRDO Scientist Ravi Kumar Gupta has made a similar sensational claim about the UPA government with regards to Mission Shakti.*

After former ISRO chief G Madhavan Nair claimed that the UPA II government delayed Chandrayaan-2 for Mars mission owing to political considerations, former DRDO scientist Ravi Kumar Gupta has made a sensational claim about the same government about Mission Shakti.

Gupta has said that India was capable of launching Mission Shakti in 2012 but the then UPA government didn't give them the nod to do the testing.

"When we had successfully tested ballistic missile defence. The technology needed for destroying the ballistic missile defence is needed to destroy satellites in space. Dr VK Saraswat who was the DRDO chief in 2012 had told the media that we can make an anti-missile satellite. He said that we have the technology needed for it but we did not have the government sanction. We continued with the studies and simulations. I believe we could have done the Mission Shakti in 2012. There is no doubt that whatever we have achieved in 2019 we could have done in 2012 and our stature in the world would have been improved then," he said.

In an exclusive interview to Republic on Thursday, Madhavan Nair stated that the Chandrayaan-2 mission got delayed because the then Dr Manmohan Singh-led UPA-2 government at that time (2009-2014) decided to go with a Mars mission and diverted the preparations to that mission even as all approvals were in place. Furthermore, he revealed that certain "political uncertainties" delayed the space program.

The Modi government has approved the Chandrayaan-2 and the Gaganyaan missions.

Chandrayaan-2, India's second mission to the moon, will launch on July 15 at 2.51 am on board the GSLV MK-III vehicle from the spaceport of Sriharikota.

The Centre on Thursday also made a huge announcement that India will send its first indigenous manned space mission in 2022 in the year. In the same news briefing, ISRO chief K Sivan said that India is planning to have its own space station.

<https://www.republicworld.com/india-news/general-news/watch-after-ex-isro-chief-says-upa-2-blocked-chandrayaan-2-drdo-scientist-alleges-mission-shakti-was-similarly-blocked>