

Wed, 24 July 2019

BrahMos recalls its association with ISRO's Moon mission

New Delhi: Even as the Chandrayaan-2 spacecraft of the Indian Space Research Organisation (ISRO) moving in the "right direction" on its way to Earth's only natural satellite, Moon, the BrahMos Aerospace Limited, a joint venture between India's DRDO and Russian rocket design bureau NPO Mashinostroyeniya, expressed happiness over its association with the mission and in particular the GSLV-MKIII Launch Vehicle, popularly known as "Bahubali".

India had on Monday launched Chandrayaan-2 on-board its powerful rocket.

GSLV-MkIII-M1 from the spaceport of Sriharikota in Andhra Pradesh with the aim of landing a rover in the unexplored lunar south pole.

"Sub-assemblies and components manufactured at BrahMos Aerospace Thiruvananthapuram Limited have been used for various stages of the GSLV Mark III Launch Vehicle after passing rigorous quality and acceptance testing standards," said an official statement here on Tuesday.

"These include the Engine Thrust Chamber of the L 110 Section, components for the main engine like High Thrust Gas Generator and Turbine Casing, Titanium gas bottles and Titanium Liners for various stages including the Cyro Engine stage and Flex Seals for S 200 motor case," it said.

<http://www.millenniumpost.in/nation/brahmos-recalls-its-association-with-isros-moon-mission-365033>

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India's army continues to suffer from shortage of anti-tank guided missiles

*Despite recent progress, the Indian Army continues to
suffer from a lack of anti-tank guided missile systems*

By Franz-Stefan Gady

The Indian Army and the Defense Research and Development Organization (DRDO), the Indian Ministry of Defense's (MoD) research and development branch, have successfully concluded summer trials of the NAG third-generation anti-tank guided missiles (ATGM) at the Indian military's test range at Pokhran in the Thar Desert region in northwestern India earlier this month.

The summer trials were conducted between July 7 to 18, according to an Indian MoD statement. "As part of the NAG summer user trials, six missions were conducted under the extreme temperature conditions of the Pokhran Ranges," the statement reads. "All the missiles have met the mission objectives including minimum range, maximum range, in direct attack as well as top attack modes and achieved a direct hit onto the target."

Winter user trials of the Nag ATGM were reportedly successfully completed earlier this year. "The trials were conducted by the user team from the Army as per the user defined trial directive," the MoD

states. “The missile system has already cleared the winter user trials in February 2019. All the ten missiles, which were fired during winter and summer trails, successfully hit the targets.”

The indigenously designed and developed Nag ATGM has been under development by DRDO for over a decade. The NAG is an all-weather, fire-and-forget, top attack ATGM with an estimated operational range of between three to seven kilometers. All tests of the new ground-launched ATGM to date have been conducted from an armored combat vehicle, the NAMICA, an Indian license-produced variant of the Soviet-era BMP-II armored infantry fighting vehicle.

“The missile is launched from the NAG missile carrier (NAMICA) which is capable of carrying up to six combat missiles,” according to the MoD. “The robust imaging algorithm has made the missile hit the target at four-kilometer distance even in severe summer desert conditions which is unique in its class.” During the earlier testing phase of the ATGM, a number of technical issues arose including with the Nag’s imaging infrared (IIR) seeker head that caused multiple delays as it did not satisfy Indian Army requirements for thermal sensors.

The Indian Army has to date also not placed an order for the Nag ATGM, although, according to the MoD, it intends to procure up to 8,000 new ATGMs of the type beginning with an initial order of 500 missiles. The ATGM is manufactured by state-owned Bharat Dynamics Limited.

Notably, while the recent statement notes that “completion of summer user trials will now pave the way for production and induction of the missile system into the Army,” so far the MoD has only issued an acceptance of necessity for the purchase of the new weapon system. The Nag ATGM will still have to clear a number of bureaucratic hurdles before a final sales contract can be inked between the government and India’s sole missile maker.

It is still far from certain that the Nag will fulfill all of the operational requirements laid out by the Army. A contract will also likely be signed following a significant drop in price, as the Army has time and again expressed its preference for cheaper foreign-made ATGMs. The Indian government scrapped a \$500 million deal with Israeli defense contractor Rafael Advanced Defense Systems Ltd. for 321 Spike ATGM systems and 8,356 missiles in favor of the man-portable variant of the Nag, the man portable anti-tank guided missile (MPATGM).

According to an internal assessment of the Army, the service lacks over 68,000 ATGMs of various types and around 850 launchers. The majority of the Army’s current inventory consists of second-generation Milan-2T and Konkurs ATGM systems that lack night fighting capabilities. The service is reportedly pushing for a fast-track procurement of 2,500 third-generation shoulder-fired ATGMs and 96 launchers through a government-government contract. In January, the MoD approved the procurement of 5,000 French-made second-generation MILAN.

It remains to be seen whether the Nag in its current configuration can help fill the capability gap.

<https://thediplomat.com/2019/07/indias-army-continues-to-suffer-from-a-shortage-of-anti-tank-guided-missiles/>



Wed, 24 July 2019

Northern Army commander visits DIHAR, Leh

Jammu: Army's Northern Command Chief Lt Gen Ranbir Singh visited the Defence Institute of High Altitude Research (DIHAR) in Leh district of Ladakh region on Tuesday, officials said.

Lt Gen Singh was by accompanied by his wife Kalpana Singh Dhatt and Lieutenant General Y K Joshi, the general officer commanding "Fire and Fury" corps, they said.

DIHAR is an agro-animal research and development institute of the DRDO, located in the high altitude cold desert trans-Himalayan region of Ladakh, which is mandated to fulfill the fresh food requirements of troops in the sector by developing appropriate technologies.

DIHAR Director Dr O P Chaurasia briefed the three on various activities being undertaken by the institute.

Over the years, with the effort of DIHAR, local farmers of Ladakh are able to supply fresh food requirement of the Army during the summer season.

Now the institute is intensively endeavouring to develop technologies whereby local supply of vegetables during winter months can be enhanced, the officials said. AB DPB DPB

(Disclaimer :- This story has not been edited by Outlook staff and is auto-generated from news agency feeds.)

<https://www.outlookindia.com/newsscroll/northern-army-commander-visits-dihar-leh/1581387>

THE TIMES OF INDIA

Wed, 24 July 2019

Eye on China, India set to kickstart 1st space war drill

By Rajat Pandit

- *The Indian armed forces are all set to conduct the country's first-ever simulated space warfare exercise "IndSpaceEx" this week*
- *India successfully tested an anti-satellite (A-Sat) interceptor missile on March 27 this year*

New Delhi: The Indian armed forces are all set to conduct the country's first-ever simulated space warfare exercise this week, which will lead to an assessment of the "imminent threats" in the expanse beyond earth and the drafting of a joint space doctrine for futuristic battles. The tri-Service integrated defence staff (IDS) under the defence ministry is conducting the two-day "IndSpaceEx", with all military and scientific stakeholders on Thursday and Friday, in the backdrop of China's rapidly expanding space and counter-space capabilities.

TOI was the first to report that such an exercise was being planned after India successfully tested an anti-satellite (A-Sat) interceptor missile to destroy the 740-kg Microsat-R satellite, at an altitude of 283-km in the low earth orbit (LEO), in a "hit-to-kill mode" under "Mission Shakti" on March 27 this year.

With China developing a wide array of A-Sat weapons, both kinetic in the shape of co-orbital killer satellites and direct ascent missiles as well as non-kinetic ones like lasers and electro-magnetic pulse weapons, officials say India has no option but to develop deterrence capabilities to ensure no adversary can threaten its assets in outer-space.

"PM Narendra Modi said the A-Sat test in March was conducted to make India stronger and more secure as well as further peace and harmony. In line with this vision, IndSpaceEx is being conducted to identify key challenges and shortfalls if a conflict escalates to the space dimension. A leading IIT has also been engaged to work on the potential solutions," said a senior official.

Though India for long has had an expansive civilian space programme, as was once again demonstrated by the successful launch of the Chandrayaan-2 mission on Monday, it largely restricted military use of space to intelligence, reconnaissance, surveillance, communication and navigation.