



Last of the missiles conceived by Kalam in 1983 finally ready for induction

India on July 19 declared its indigenous third-generation anti-tank guided missile (ATGM) NAG ready for induction as an operational weapon in the Army. A helicopter-launch version has also been developed. This is the last of the missile systems conceived under the Integrated Guide Missile Development Programme (IGMDP) in 1983 which will now be produced industrially to be used as an operational military weapon.

The announcement follows successful completion of summer user trials by the Indian Army at the Pokhran Field Firing Ranges in Rajasthan from July 7 to 18.. The 4 km range missile cleared winter trials in February 2019.

Finally coming good 39 years after its conception, the NAG has reduced the market for foreign-made ATGMs in India. The maturity of this indigenous missile is reportedly the reason for putting on the backburner a larger order for the Israeli Spike to equip frontline battalions of the Army.

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India's Ministry of Defence claimed a 100 per cent success rate in user trials for the NAG, which has been developed by the Defence Research and Development Organisation (DRDO).

"As part of the NAG summer user trials, six missions were conducted under the extreme temperature conditions of the Pokhran Ranges. 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 on to the target," the Ministry of Defence announced in a statement. The imaging algorithm withstood the test of severe hot weather conditions in ensuring the missile hit the target.

The IGMDP – under which the NAG was conceived along with the Prithvi, Agni, Trishul and Akash missiles under the leadership of the legendary Missile Man, Dr APJ Abdul Kalam in 1983 – was itself brought to a close in 2008. The only missile under the IGMDP which was abandoned was the Trishul, which was meant to be a short-range anti-missile missile

"All the ten missiles, which were fired during winter and summer trails, successfully hit the targets," the statement added.

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India's had greater success with strategic missiles than with tactical ones.

The NAG is an all-weather ATGM with day and night capability, developed to destroy highly fortified enemy tanks within a range bracket of 500 metres to 4 km. It is a fire and forget missile which uses an imaging infra red seeker in lock-on-before-launch mode.

The missile is launched from the NAG missile carrier (NAMICA) – a modified BMP-2 Infantry Combat Vehicle – which is capable of carrying up to six combat missiles. The imaging algorithm withstood the test of severe hot weather conditions in ensuring the missile hit the target.

This ATGM uses an 8 kg tandem HEAT warhead capable of penetrating Explosive Reactor Armour and Composite Armour. Integration work is going on to retrofit the Rudra helicopter with the Helina variant of the NAG. The helicopter-launched version has a nose-mounted thermal imaging system for guiding the missile.

http://www.defencenews.in/article/Last-of-the-missiles-conceived-by-Kalam-in-1983-finally-ready-for-induction-585970

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Hi-tech equipment on display at Police Expo

New Delhi: Taking country's police, civil defense and homeland security to newer heights with modernised equipment and advance technologies, leading manufacturers and technology players from Singapore, Israel, Korea, Taiwan, China, UK, USA, Malaysia, Germany, Australia, Poland and other nations today displayed the best technologies in safety and security on the concluding day of International Police Expo 2019.

The next generation bomb suit was introduced for bomb detection and disposal squads, which are made in India.

Bomb suit EOD 10 is engineered to provide best-in-class balanced protection and support to bomb technicians against the threats of an explosive blast such as overpressure, fragmentation, impact and heat.

Lightest women-friendly concealed carry pistol Glock 42 was also up on display. It is the lightest women-friendly pistol and as small as a mobile phone. Women can carry it in their purse.

With the increasing cases of mob-lynching, the DRDO has developed and tested chilli grenades made from the Naga chilly. The chilli bomb has been approved for use as a non-lethal mob dispersal agent and maintaining law and order. For the first time, India has developed an alternative of teargas from naturally procured chilli.

Chilli grenades are being successfully used by the police in Rajasthan, Bihar and Manipur and CAPF in India.

India's lightest bullet-proof jacket 'Bhabha Kavach' from the Ordnance Factory Board was also launched at the expo. Developed by Bhabha Atomic Research Centre (BARC), this state-of-the-art jacket can withstand 7.62mm hard steel core or bullets fired from an AK-47 rifle, 5.56mm INSAS bullet and even the recently decommissioned 7.65mm bullet of self-loading rifle (SLR).

Women-friendly pistol 'Glock 42'

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