



NAG Missile: Anti Tank Guided Missile

Why in News

Recently, the final user trial of 3rd generation Anti Tank Guided Missile (ATGM) NAG was carried out successfully from Pokhran range in Thar desert (Rajasthan).

Key Points

- **Developed By:** [Defence Research and Development Organisation \(DRDO\)](#)
- **Features:** //



- The NAG missile has been developed to **strike and neutralise highly-fortified enemy tanks**. It also has **night strike capabilities**.
 - ATGMs are missile systems that can strike and neutralise armoured vehicles such as tanks.
- It has a **minimum range of 500 metres** and **maximum range of 4 km**.
- As a **third-generation 'fire and forget' category system**, NAG uses an **imaging infra-red seeker** to lock on to the target before launch.
- In the **top attack mode**, the missile is required to climb sharply after launch and travel at a certain altitude, then plunge on top of the target. In the **direct attack mode**, the missile travels at a lower altitude, directly striking the target.
- It has a capability to **defeat Main Battle Tanks (MBT)** equipped with composite and reactive armour.
- The **NAG missile carrier (NAMICA)** is a **Russian-origin BMP-II based system** with **amphibious capability**.
 - BMP-II is a mechanized infantry fighting vehicle.
- **Version of NAG ATGM:** DRDO is currently in the final stages of the development of the **helicopter-launched version of Nag ATGM**, called the **Helina**, which has undergone successful tests in 2018.
- **Significance:**

- With this final user trial, Nag will **enter the production phase.**
 - The **missile** will be produced by Defence Public Sector Undertaking (PSU) **Bharat Dynamics Limited** (BDL), whereas **Ordnance Factory, Medak**, will produce the **NAMICA**.
- This means that the **Indian Army will no longer have to import this weapon from either Israel or the USA** for the range of four kilometres.
 - It was due to unavailability of a credible anti-tank weapon, that **India had to buy around 200 pieces of [Spike anti-tank missiles](#) from Israel** as emergency purchases after the **[aggression by the People's Liberation Army \(China\) in Ladakh](#)**.
- Further, the army is currently using **second generation Milan 2T and Konkur ATGMs** and has been looking for about third-generation missiles, which are important for stopping advancing enemy tanks.
- **Other Missile Systems:** Missiles have been developed by India under '**[Integrated Guided Missile Development Program](#)**'.

IGMDP (Integrated Guided Missile Development Program)

- It was conceived by Dr. A.P.J. Abdul Kalam to enable India attain self-sufficiency in the field of missile technology. It was approved by the Government of India in 1983 and completed in March 2012.
- The **5 missiles (P-A-T-N-A)** developed under this program are:
 - **Prithvi: Short range** surface to surface **ballistic missile**.
 - **Agni:** Ballistic missiles with different ranges, i.e. Agni (1,2,3,4,5)
 - **Trishul:** Short range low level **surface to air missile**.
 - **Nag:** 3rd generation **anti-tank missile**.
 - **Akash:** Medium range **surface to air missile**.
- **Other Recent Tests:**
 - The NAG ATGM trial was in continuation of a series of missile tests conducted by the DRDO in the last one-and-a-half months.
 - Among these trials were two other ATGMs - the **Laser-Guided ATGM**, and the **Stand-Off Anti-Tank Missile (SANT)**.
 - DRDO, successfully tested India's first indigenous anti-radiation missile named **Rudram**, Supersonic Missile Assisted Release of Torpedo (**[SMART](#) system**), nuclear capable **[missile Shourya](#)**, **[Naval version of the BrahMos](#)** and **[Hypersonic Technology Demonstrator Vehicle](#)** (HSTDV).

[Source: PIB](#)