



ABHYAS: High-speed Expendable Aerial Target

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Why in News

Recently, The **Defence Research and Development Organisation** (DRDO) successfully flight-tested **Abhyas High-speed Expendable Aerial Target (HEAT)** from the Integrated Test Range in Chandipur, off the Bay of Bengal coast in Odisha.

DRDO is the **Research & Development wing of the Ministry of Defence**, Govt of India, with a vision to empower India with cutting-edge defence technologies.

Key Points

- **Designed and developed by:**



Aeronautical Development Establishment (ADE), of DRDO.

- ADE is a key Aeronautical Systems Design Laboratory under DRDO.
- It is involved in the design and development of the state-of-the-art **Unmanned Aerial Vehicles (UAV)** and Aeronautical Systems and technologies to meet the requirements of the **Indian Armed forces**.

- **Features**

- It is powered by a **gas turbine engine to sustain a long endurance flight at subsonic speed.**
- It is equipped with a **MEMS** (Micro-Electro-Mechanical Systems)-based **Inertial Navigation System (INS)** for navigation along with the Flight Control Computer (FCC) for guidance and control.
- The vehicle is **programmed for fully autonomous flight** and their check-out is done using a laptop-based Ground Control Station (GCS).

- **Utility:**

It will be **used as a target for the evaluation of various missile systems.**

It offers a **realistic threat scenario** for practice of weapon systems.

- **Other Recent Developments:**

- **In September 2021**, the DRDO tested a new version of the **Akash Missile – ‘Akash Prime’** – from the Integrated Test Range (ITR), Chandipur, Odisha.
- **In July 2021**, DRDO launched the **Akash-NG (New Generation)** and the Man Portable Anti Tank Guided Missile (MPATGM).
- **In June 2021** a new generation nuclear capable ballistic missile **Agni-P (Prime)** was successfully test-fired by the DRDO.
- **In February 2021** India also successfully test-fired indigenously-developed anti-tank guided missile systems **‘Helina’ and ‘Dhruvastra’**.
- **In October 2020**, the **DRDO** conducted a successful flight test of the **Supersonic Missile Assisted Release of Torpedo (SMART)** from Wheeler Island off the coast of Odisha.

Source: PIB