

High-speed Expendable Aerial Target 'ABHYAS'

Posted at: 07/02/2024

Context:

DRDO carries out successful flight trials of High-speed Expendable Aerial Target 'ABHYAS' from Integrated Test Range, Chandipur.

About ABHYAS:

1. Four flight trials of High-speed Expendable Aerial Target (HEAT) - ABHYAS were successfully carried out by Defence Research & Development Organisation (DRDO) from the Integrated Test Range, Chandipur in Odisha during January 30 to February 02, 2024.
2. The trials were conducted with four different mission objectives in a revised robust configuration using a single booster designed by Advanced Systems Laboratory, Hyderabad to provide reduced launch acceleration.
3. The objectives like safe release of booster, launcher clearance and attaining the required end of launch velocity were achieved.
4. During the flight trials, various parameters like required endurance, speed, manoeuvrability, altitude and range were successfully validated.

Significance:

1. Designed by DRDO's Aeronautical Development Establishment (ADE), ABHYAS offers a realistic threat scenario for practice of weapon systems.
2. It is designed for autonomous flying with the help of an auto pilot indigenously made by the ADE.
3. It has Radar Cross Section, Visual and Infrared augmentation system required for weapon practice.
4. It has a laptop-based Ground Control System with which the aircraft can be integrated and pre-flight checks, data recording during the flight, replay after the flight and post-flight analysis can be carried out. ABHYAS requires minimum logistics and is cost effective compared to imported equivalents.
5. The systems tested recently were realised through Production Agencies - Hindustan Aeronautics Limited (HAL) and Larsen & Toubro (L&T) Defence. With identified production agencies, ABHYAS is ready for production. The system has export potential and can be offered to friendly countries.