



New Autonomous Flying Wing Technology Demonstrator

Why in News?

Recently, [Defence Research and Development Organisation \(DRDO\)](#) carried out the maiden test flight of a new **unmanned Aerial Vehicle**, an **Autonomous Flying Wing Technology Demonstrator**.

- DRDO is in the process of developing **Unmanned Aerial Vehicles (UAVs)** of **different classes** to meet the requirements of the armed forces.

What is Autonomous Flying Wing Technology?

▪ About:

- It's an [Unmanned Combat Aerial Vehicle \(UCAV\)](#) or a combat drone that is a flying wing type.
- It refers to a **tailless fixed-wing aircraft that houses its payload and fuel in its main wings and does not have a defined fuselage-like structure found in conventional aircraft.**
- The design has the potential to deliver **high fuel efficiency and stability** if executed with precision.

▪ Applications:

- Mapping of Landslide Affected Area
- Infested Crop Damage Assessment
- Large Scale Mapping
- Traffic Monitoring and Management
- Logistics support

What are its Specifications?

- The Autonomous Flying Wing Technology Demonstrator is a precursor to an **autonomous stealthy UCAV** which is being developed by the **DRDO's Aeronautical Development Establishment (ADE)**, primarily for the **Indian Air Force**.
 - 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](#).
- The UCAV will be **capable of launching missiles and precision-guided munitions**.
- The vehicle is **powered by a small turbofan engine**.

[Source: TH](#)

