

## India's First AI Fighter Jet 'FWD Supreme Lite'

**Prelims:** *Current events of national and international importance | Defence*

### Why in News?

*Recently Indian defence startup Flying Wedge Defence & Aerospace (FWDA) unveiled FWD Supreme Lite touted as India's first AI-fighter jet.*



**FLYING WEDGE**  
DEFENCE & AEROSPACE

BENGALURU-BASED DEFENCE STARTUP



**AI-PILOTED**  
AUTONOMOUS  
COMBAT AIRPOWER

# INDIA'S AI FIGHTER JET IS HERE

Bengaluru-based Flying  
Wedge Defence unveils  
**FWD SUPREME LITE**

- Flying Wedge Defence & Aerospace has unveiled the FWD Supreme Lite. It is an approximately 250-kg flight technology demonstrator for the company's AI-piloted fighter aircraft programme.
- The aircraft is designed for autonomous operations using AI for navigation, situational awareness and mission execution.
- Its first flight is targeted for Q3 2026.



The company is also developing a larger **FWD SUPREME HEAVY**, envisioned for ISR, strike and collaborative combat missions.



FWD Supreme Lite is currently a technology demonstrator, with its flight and combat capabilities yet to be demonstrated.



**AI-DRIVEN  
AUTONOMY**

Navigation, situational  
awareness & mission  
execution.



**~250 KG TECHNOLOGY  
DEMONSTRATOR**

Paving the way for  
future AI-piloted  
combat aircraft.



**FIRST FLIGHT TARGET:  
Q3 2026**

Building towards a  
new era of intelligent  
aerial systems.

**FWD SUPREME HEAVY  
(IN DEVELOPMENT)**

 **ISR**

 **STRIKE**

 **COLLABORATIVE COMBAT**

- **Developer** - Flying Wedge Defence & Aerospace (FWDA), an Indian defence startup.
- **Platform** - FWD Supreme Lite.
- **Role** - Flight technology demonstrator.
- **Technology focus** - Artificial Intelligence (AI)-enabled piloting.
- **Objective** - Demonstrate technologies required for future autonomous/AI-piloted combat aircraft.
- It was designed and developed entirely in India.
- **Endurance and range** - Up to 30 hours and a range of 3,000 km.
- **Operations** - To provide AI-driven autonomy for precision strikes,
  - swarm operations
  - real-time Intelligence
  - Surveillance
  - Reconnaissance (ISR) missions.

**Mobbing Doctrine** is a modern military air combat strategy developed by FWDA

*that uses a coordinated swarm of artificial intelligence (AI) piloted fighter jets.*

- **Significance for India** - It represents the growing role of start-ups and private industry in India's defence technology ecosystem.
- The unveiling marks a shift from digital engineering and conceptual development to a physical flying platform.

### **Global autonomous aircraft race**

- In **United States**,
  - Shield AI's X-BAT is progressing towards its first VTOL flight.
  - Anduril's YFQ-44A Fury is advancing under the US Air Force's Collaborative Combat Aircraft effort.
- In **Germany**, Helsing's CA 1 Europa is being developed as an advanced, multi-role autonomous uncrewed combat aerial vehicle (UCAV).

### **Flying Wedge Defence & Aerospace (FWDA)**

- It is an Indian deep-tech defence startup established in 2022.
- **Specialised in** - Electronic warfare, autonomous combat aircraft, and unmanned aerial vehicle (UAV) systems.
- **Headquartered in** - Bengaluru, Karnataka, where it operates an advanced manufacturing facility in Electronic City.

### **Reference**

[The Economic Times| India's First AI Fighter Jet 'FWD Supreme Lite'](#)