

Heron Mk II UAVs

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Why in News?

The Indian armed forces have signed contracts for additional satellite-linked Heron Mk II Unmanned Aerial Vehicles (UAVs) under emergency procurement.

- **Heron MK-II** - It is a **medium-altitude long-endurance (MALE)** unmanned aerial vehicle.
 - MALE UAV - Built to fly between 10,000 and 30,000 feet for long periods, often **more than 24 hours, nonstop**.
 - It bridges the gap between smaller tactical drones and larger high-altitude systems, offering the right mix of endurance, payload, and cost-efficiency.
- **Developed by** - **Israel Aerospace Industry (IAI)**.

Key Features

- **Endurance** - more than 24 hours (some 45 hours) of continuous flight (without refuelling)
- **Altitude** - Operates at altitudes up to 35,000 feet
- **Speed** - Maximum of 150 knots
- **Payload Capacity** - Approximately 500 kg (half a tonne)
- **Sensors & Systems** -
 - It supports **multiple payloads simultaneously**, including Electro-Optics, Radars, ELINT, COMINT, ESM, and Communication Relay systems.
 - Synthetic Aperture Radar (SAR) - Provides high-resolution imaging even in poor visibility
 - Electro-Optical Systems - **Day/night surveillance** capability
 - SIGINT Sensors - Signals intelligence for electronic warfare and monitoring adversary communications
- **Operational Capabilities** - Its **fully automated** take-off and landing

systems, coupled with encrypted satellite communication, enable remote operations, ***flexible mission*** planning and deployment across varied theatres ***without ground-based line-of-sight control***.

- **Uses** - Can carry advanced sensors for surveillance, reconnaissance, and electronic warfare.
 - In India, Heron drones are primarily deployed for long-range surveillance on both the ***Chinese and Pakistan frontiers*** and have proven highly effective.
- **Global Use** - It is already operational with the Israeli Air Force and over 20 other entities worldwide.
- **Future Partnership** - Now, IAI is focused on manufacturing the MK-II in India through partnerships with Hindustan Aeronautics Limited (HAL) and Elcom.
 - Aim - To manufacture the systems in India, creating an Indian version of the Heron - not only the MK-II but other systems as well.

References

1. [The Hindu | India to procure more satellite-linked Heron Mk II UAVs](#)
2. [IAI | Heron MK II](#)