

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 highaltitude systems, offering the right mix of endurance, payload, and cost-efficiency.
- Developed by <u>Israel Aerospace Industry (IAI)</u>.

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 <u>Day/night surveillance</u> 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.
 - $_{\circ}$ 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

