Manekshaw Centre, IIT JODHPUR
In Association With
Konark Corps, Indian Army

PROUDLY PRESENTS

FLYING WINGS

NATIONAL LEVEL HACKATHON 2026

Startup & Industry Category

Registration Start Date
1 March 2026

Registration End Date
15 March 2026

FOR WEBSITE

Startup & Industry Category

MISSION BRIEF

- Flying Wings is a national defence innovation hackathon focused on aerial systems and passive RF/EW intelligence.
- It aims to validate operational concepts, stress-test field proto-types, and fast-track industry-to-defence pathways.

THE GOLDEN TICKET

- To validate your product to defence-grade benchmarks.
- For demo pilots to interact with army-aligned evaluators and researchers.
- For fast-track TRL and access collaborations.
- For visibility and potential procurement / pilot projects.

JOINING REQUIREMENTS

- Defence & dual-use startups, MSMEs.
- Industry R&D and product teams.
- Professionals in UAVs, Autonomy, RF/EW, Sensing, AI, navigation.

REWARDS

- Trophies & certificates for winners in each vertical.
- Direct engagement opportunities with the Centre & Army contacts.
- Possibility of pilots and further tech maturation support.

CHALLENGE ZONES

BUILD • NAVIGATE • DETECT

Three operations testing low-cost airframes, GPS-denied autonomy, and passive RF/EW intelligence. Deliver testable, offline, unclassified prototypes.

OPS 1 - CARDBOARD DRONE

Forge a battle-ready cardboard UAV to carry a 2 kg payload in nose cone.

- Range ⩾ 10 km
- Speed : 50–60 km/h
- Payload : 2 kg at nose
- Airframe ⩾ 70% cardboard
- Durability : Survive 2 m drop
- Empty Weight < 5 kg
- Wing Span < 2.5 m

OPS 2 - GPS-DENIED NAVIGATION

Develop a flight capable of navigating autonomously without onboard GPS reception.

- Flight Time ⩾ 15 min
- Range ⩾ 1000 m

- ✓ Initial coordinates to be provided at start
- ✓ Navigate 5 assigned destinations
- ✓ Autonomous Return-to-Home

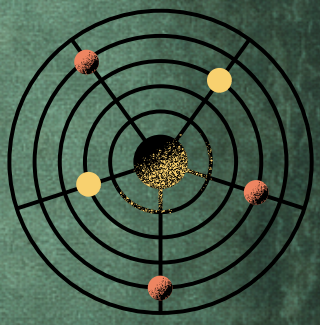
Allowed Sensors

Vision · LiDAR · IMU · Odometry · UWB

OPS 3 - DRONE IN EW ENVIRONMENT

Choose One Track

Track 1	Track 2	Track 3
Spectrum Intelligence	Direction Finding	Anti-UAS Early Warning
RF detection, classification & signature library	Passive AOA/TDOA bearing estimation	Detect UAS RF activity & raise alerts ≤2 sec
Pd ≥0.90 | F1 ≥0.80	RMS bearing error ≤ 5° for SNR ≥ 10 dB RMS bearing error ≤ 10° for SNR 0–10 dB	(F1 ≥0.85)



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Deliverables

- Docker prototype
- JSON/SQLite logs
- Minimal UI/CLI
- Technical brief
- Short explaination

THE COMPETITION MARCH!

- Round 1: This will be a virtual round, demo, proof of concept runnable artifacts – 7+7+1 minutes (10 slides presentation + Q&A + changeover).
- Round 2: Live demos, bench tests, awards, site acceptance.

TIMELINES

- Round 1 (virtual) – 3 – 4 April 2026
- Round 2 (IIT Jodhpur campus) – 17 – 18 July 2026

FEES & REGISTRATION

Participant type	Round 1	Round 2
Startup / Industry	₹7,000/ team	₹20,000/ team

SPONSORSHIP

- Platinum | Gold | Silver – speaking slots, demo stalls, logo placement.
- Startup exhibition: curated stalls.

CONTACT US

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TO REGISTER