

INVESTOR PITCH · OCTOBER 2026

SKYSHIELD

AI-based video analytics system for
advanced search and rescue and ISR

Ravin tailsitter VTOL + SkyShield ground station + on-edge AI

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THE PROBLEM

The human vigilance bottleneck

On a remote mining site, a tethered drone flew an 8-hour monitoring mission. One operator had to scan the live video by eye for safety violations across haul roads, pedestrian-free paths and exclusion zones.

Aircraft can now stay on station far longer than a person can reliably watch. The weak point in long-endurance surveillance is not flight time. It is operator fatigue and missed detections.

8 hrs

continuous monitoring mission

1

operator, several active zones

0

automated triage: every frame reviewed by eye

THE SOLUTION

One integrated system: aircraft, ground station and AI

SkyShield GCS

GROUND STATION · RELEASED, V2.0.2

One interface for flight control, mission planning, live video, maps, telemetry and AI alerts.

AI video analytics

INTELLIGENCE LAYER · RELEASED

Watches the live video continuously, identifies mission events, not just objects, and alerts only when it matters.

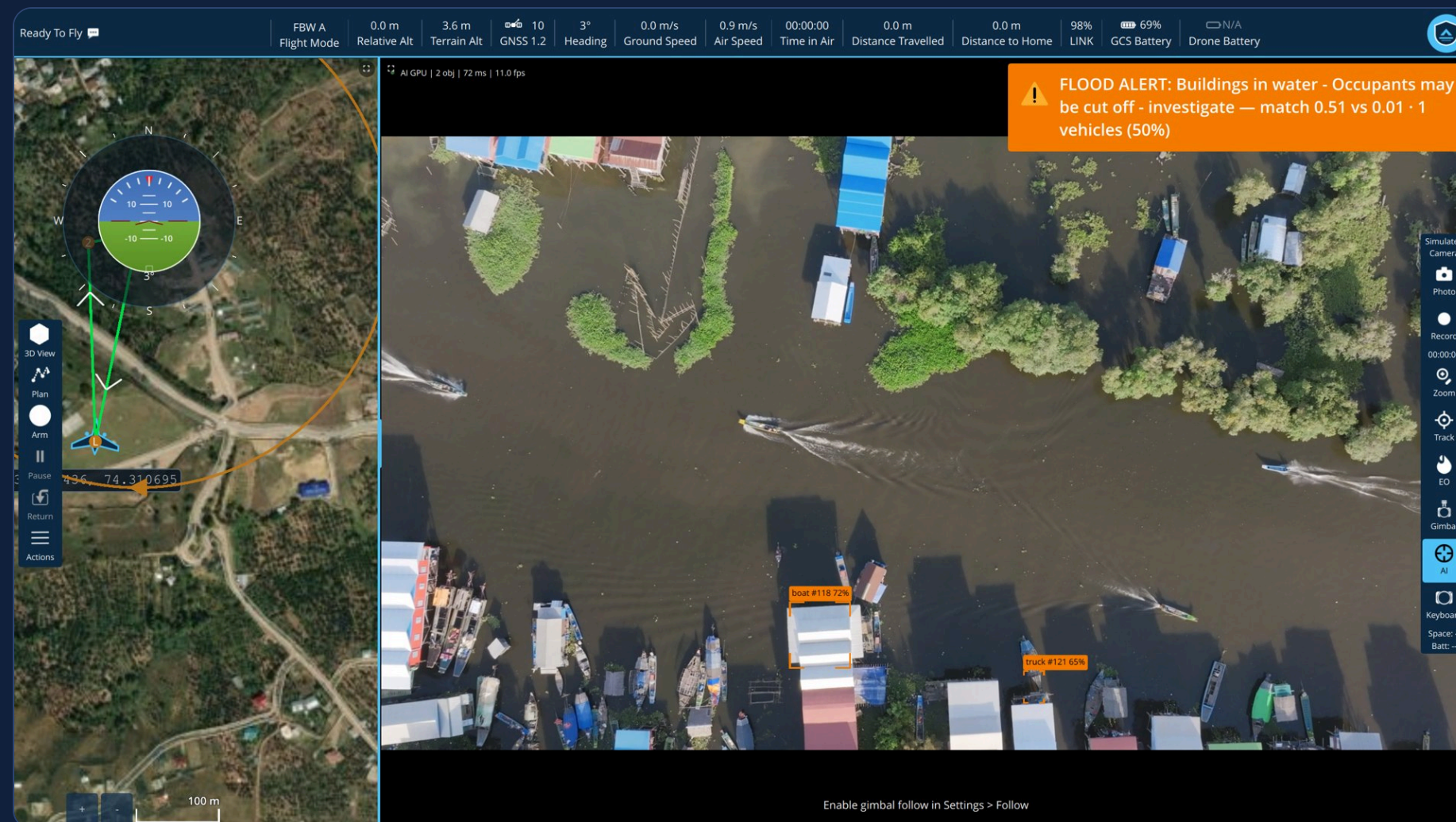
Ravin

TAILSITTER VTOL · DESIGNED, READY TO BUILD

Takes off vertically with no runway, then cruises on its wing for range and endurance.

THE PRODUCT, TODAY

SkyShield GCS: built, released and demonstrable

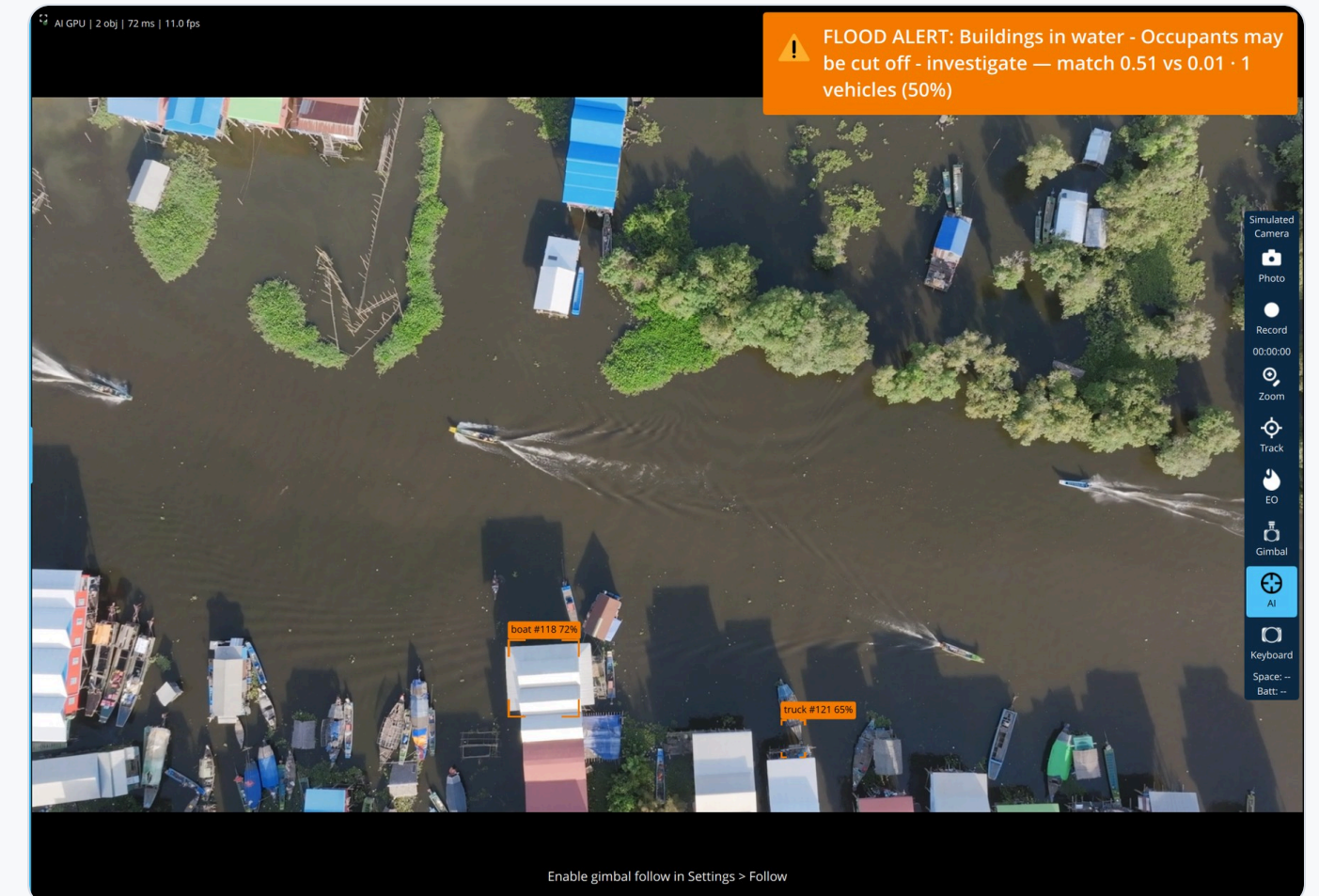


- **Unobstructed live video** beside the map, with no floating widgets over the picture
- **Fast onboarding:** a clean interface and a built-in training simulator
- **Keyboard control mapping** for gimbal and payload, so no separate joystick hardware
- **Shipped as a product:** installer, automatic updates, device licensing, 55-page manual

Screenshot: SkyShield 2.0 with a simulated aircraft and recorded aerial video. Not yet flown on our own aircraft.

Purpose-built AI that reports events, not just objects

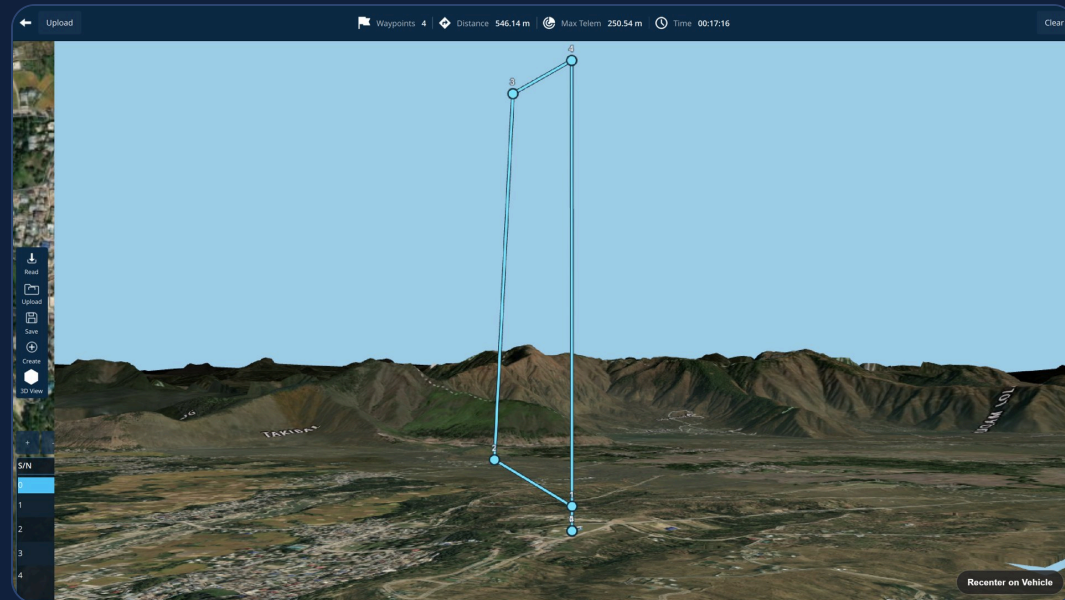
- 47 mission events in 11 categories: people, fire, flood, vehicles, routes, damage, search clues, hazards
- 1 alert at a time, spoken aloud, with the evidence and a count of people and vehicles in the area
- 0 cloud or cellular dependency: everything runs on the ground station



An alert fires only when the scene matches the event clearly more than its look-alikes. Tested on recorded aerial footage so far.

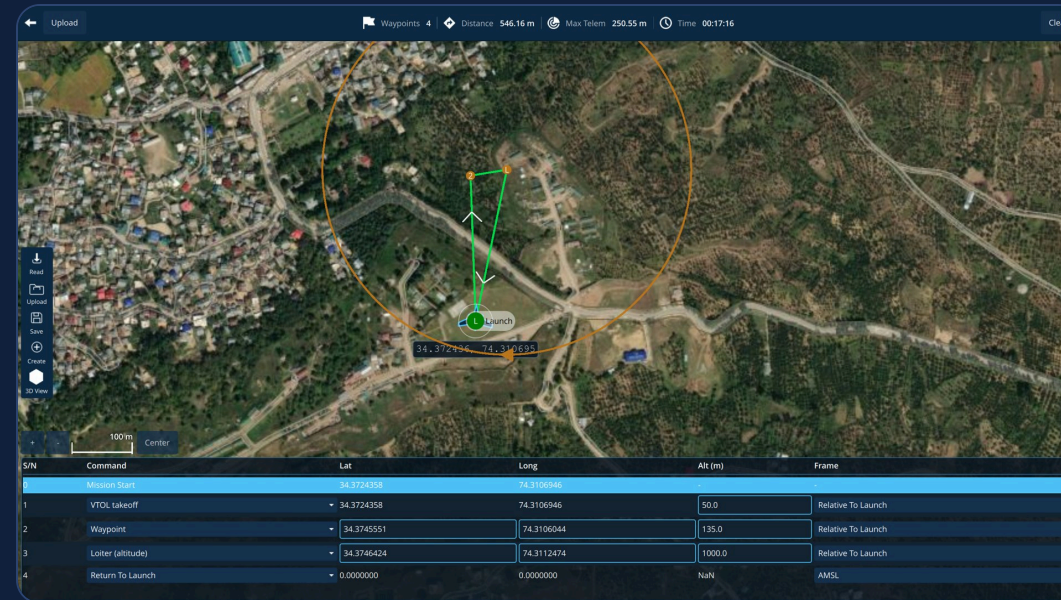
BUILT SINCE THE LAST DECK

Three features that make it a field tool



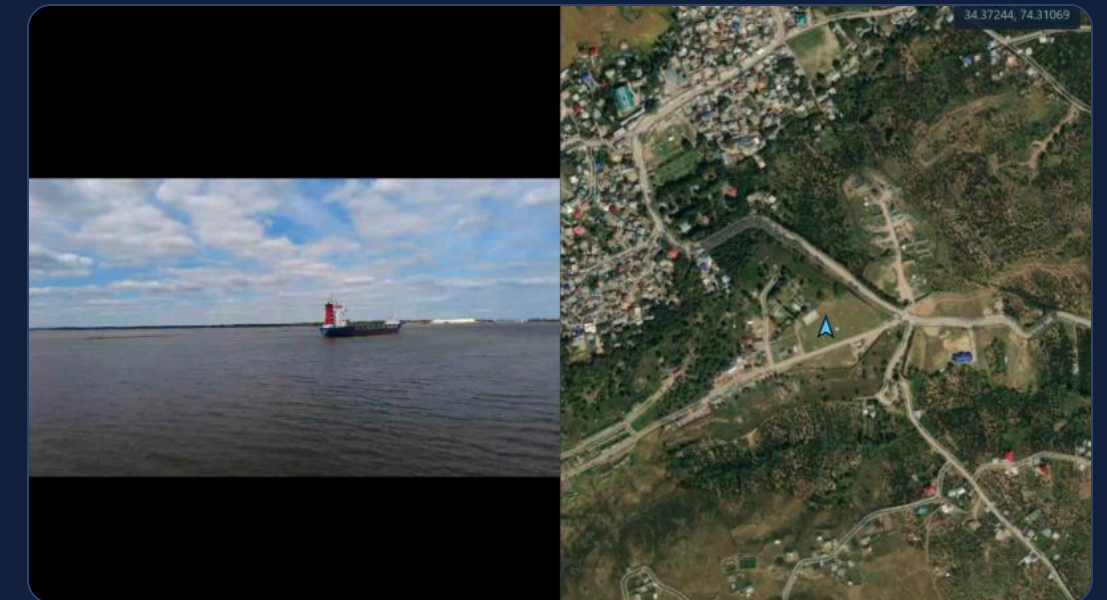
3D terrain view

See the real flight profile over real terrain before take-off, and follow the aircraft in 3D in flight.



Terrain self-check

The whole planned path is checked against ground height. Anything that would hit terrain shows in red.



Remote video terminal

Anyone on site scans a code and watches video, map and alerts in a browser. Nothing to install.

Also new: flight replay, training simulator, self-updating installs. Remote viewing over the internet needs a VPN today.

THE PLATFORM

Ravin: endurance of a wing, footprint of a multirotor



150 min
endurance

13 m/s
wind resistance

15 km
operating range

Parameter	Design value
Configuration	Tailless tailsitter VTOL, twin electric motors
Propulsion	Same motors for hover and cruise: no tilt, no idle lift motors
Endurance	150 min with a 40 Ah battery
Wind resistance	Up to 13 m/s
Range	15 km from the ground station
Fuselage	New streamlined body with a separate canopy
Deployment	One operator, under 3 minutes to launch
Manufacture	Build packages split across three vendors

WHY IT WINS

Technology and commercial advantages

Persistent attention

The system carries the burden of watching, so hours of flight still produce awareness.

Fully on-edge

No cloud, no cellular. It works where no network exists.

One operator

No runway, no launch gear, minimal training. Fewer people on site.

Lower bill of materials

A tailsitter needs no tilt servos, boom arms or separate lift motors.

AI off the aircraft

Analytics run on the laptop, not a costly onboard computer: less weight, power and unit cost.

No control hardware

Flight, gimbal and payload map to a standard laptop keyboard.

WHERE IT FITS

Four markets with the same need

SAR

Search and rescue

Fast aerial search over large or difficult terrain, with alerts for people and signs of them.

ISR

Surveillance and reconnaissance

Continuous watch of critical zones and remote areas, with activity reported to the operator.

Defence

Defence and border

Lightweight, runway-free surveillance where connectivity is limited or denied.

Industrial

Mining and site safety

The original use case: monitoring large, high-risk sites without constant manual watching.

The aircraft class is already bought commercially: tailsitter mapping VTOLs are on sale today. SkyShield adds what they lack, on-edge AI alerting built into the ground station.

TARGET MARKET

India first: defence, then disaster response, then industry

\$0.47 bn to \$1.39 bn

India's drone market, 2025 to 2030

16,756 a year

drones procured in India by 2030

\$23 bn

India's drone manufacturing potential by 2030

1 Defence and paramilitary surveillance

The largest segment of the market. Entry through iDEX, where the application is already submitted.

2 Disaster response and search and rescue

National and state response forces. Flood, fire and person-in-distress alerts are already built.

3 Mining and industrial site safety

The original use case. Private buyers with shorter purchase cycles than government.

What has been achieved since July

When	Milestone
Jul 2026	Ground station interface complete on an open-source flight-control base
Aug 2026	On-device detection and tracking, 3D terrain view, device-bound licensing
Aug 2026	Aircraft design calculations and propulsion analysis across ten propellers
Sep 2026	Scene alert engine with 47 events; Remote Video Terminal; flight replay
Sep 2026	Version 2.0.0 released with a Windows installer
Sep 2026	iDEX Open Challenge application submitted (Ministry of Defence)
Oct 2026	Version 2.0.2: self-updating installs, built-in training simulator
Oct 2026	Aircraft design V1.30, 25-part print split, three-vendor build packages
Oct 2026	Operator manual, first edition

Six milestones to a system ready to manufacture and sell

By end of	Milestone	Proof you can inspect
Nov 2026	Orders placed with all three vendors; first airframe parts in hand	Purchase orders, parts on the bench
Dec 2026	Prototype 1 assembled; hover and control checks passed	Hover flight log and video
Jan 2027	First full flight: vertical take-off, cruise, vertical landing	Flight log and video
Feb 2027	Camera payload fitted; prototype 2 built from the same drawings	Two aircraft flying
Mar 2027	Full mission with live AI alerts; endurance and wind tests	150 min and 13 m/s test results
Apr 2027	Design frozen: production drawings, costed parts list, manuals	Production pack and unit cost

End goal of Phase 1: a complete system that is ready for mass manufacturing and for sale.

THE ASK

₹1 crore for 20% equity: a system ready to manufacture and sell

Use of funds (indicative)

Personnel	₹27 L
Airframe and hardware: two prototype aircraft	₹23 L
Testing and flight operations	₹14 L
Camera payload and onboard compute	₹10 L
Lab, workshop and engineering equipment	₹10 L
Company, regulatory, legal and documentation	₹9 L
Ground station and software	₹7 L

What the investor gets

- 20% equity for ₹1 crore
- Funds released in parts, against the six monthly milestones
- By April 2027: two flying aircraft and a frozen, costed design ready for production
- A team ready to start: candidates are already shortlisted

Non-dilutive funding in parallel: iDEX submitted; seed-fund and DRDO schemes next.

THE FOUNDER

Built by someone who has flown, fixed and fielded drones for five years



Aman Singh

UAV systems engineer • Dehradun

- Four years at a UAV manufacturer: flight-log analysis, root-cause diagnosis and validation flights across a fleet of 20+ aircraft
- Cut fleet downtime by about 15% with preventive maintenance
- Now leading VTOL development from concept to flight test
- Designed and built a 4 kg mapping quadcopter from scratch, including its circuit board
- Earlier: drone-data and GIS engineering, and an AI crop-health system for a Himalayan conservation NGO

Let's talk



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Team: candidates for the first hires are already shortlisted.