JATAYU Startup Pitch Deck

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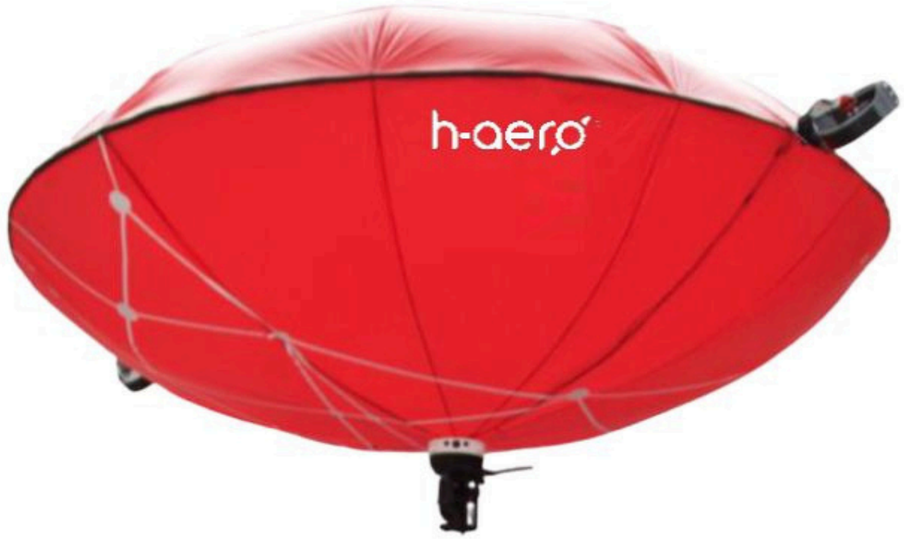
List of Content

Introduction

JATAYU:-

- Building next-generation aerial systems for surveillance and rescue
- Focused on human safety in high-risk environments
- Pre-seed stage hardware innovation

We enable persistent aerial intelligence where human presence is dangerous



Problem Statement

Problem 01

- Surveillance in terrorized and disaster-affected areas puts human teams at extreme risk
- Existing drones are:
- Easily detectable (visual & acoustic)
- Limited by short battery life
- Short mission durations lead to:
- Incomplete intelligence
- Frequent redeployments
- Higher operational cost and failure

Core Problom

Current tools cannot provide persistent, safe, and covert aerial monitoring.

Solution

- A mission-optimized aerial platform designed for:
- Low visual detectability
- Extended operational endurance
- Reliable situational awareness
- Reduces dependence on human reconnaissance
- Supports both security surveillance and search-and-rescue missions

Our Innovative Solutions

Outcome:
Safer operations, better intelligence, longer missions.

Discover Our Services

(At pre-seed, services = use cases)

Use Cases

- Aerial surveillance in high-risk or restricted zones
- Disaster monitoring and rescue support
- Infrastructure and perimeter monitoring
- Rapid deployment intelligence support

Size of Market

Global UAV & Surveillance Drone Market (2025 Estimates):

- The overall unmanned aerial vehicle (UAV) market is projected to be between ~USD 41 billion and USD 50 billion in 2025 depending on segment definitions and reporting sources.
- Analysts forecast the global UAV market could grow to ~USD 160 billion+ by 2034 at a ~15–16% CAGR.

Surveillance-Focused Segment:

- The surveillance drone/UAV market alone is estimated at USD ~5.8 billion in 2024, growing to ~USD 6.3 billion in 2025 with ~9–10% CAGR.
- Some specialized surveillance reports forecast the niche sector could be near ~USD 13.7 billion in 2025 and expand to ~USD 26.5 billion by 2032 at ~8% CAGR.

Rescue & Emergency Drone Services Market:

- The drones rescue service market — a closely related sub-segment — is projected to grow from ~USD 4.5 billion in 2025 to ~USD 28 billion by 2035 (~20% CAGR).

Direct Competitor

Direct competitors

- Commercial drones (short endurance, high detectability)

Indirect Competitor

Indirect competitors

- Military UAVs (high cost, complex procurement)
- Ground-based surveillance systems (limited coverage)

Gap:

No cost-effective solution focused on low visibility + long endurance

Current Status

- Concept & system architecture defined
- Feasibility analysis completed
- Design validation initiated
- Early mentor / expert feedback received
- Prototype roadmap finalized

Proposed Use of Funds

1. Research & Development (R&D) | 45%
Hardware Prototyping: Procurement of carbon fiber frames, high-efficiency motors, helium-grade envelopes (non-permeable materials), and flight controllers (e.g., Pixhawk or DJI SDK compatible).

Sensors & Vision: Specialized cameras for face detection, LiDAR for obstacle avoidance, and GPS modules.

ML Compute: High-end edge computing boards (like NVIDIA Jetson Orin) and cloud credits for training your detection models.

Proposed Use of Funds

(02) Operations & Inventory | 25%
Helium Supply: Setting up a consistent supply of industrial-grade helium and high-pressure tanks for field testing.

Testing Grounds: Logistics for field trials in varied terrains (forests, disaster-simulated zones).

Tools & Equipment: Soldering stations, 3D printers for custom parts, and battery management systems.

What Business Changes Drive These Metrics

Key Growth Drivers

Design iteration

- Better endurance → fewer redeployments → lower cost per mission

Focused use-cases

- Faster pilot adoption
- Shorter sales cycles

Partnerships

- Easier access to institutional buyers
- Credibility & distribution

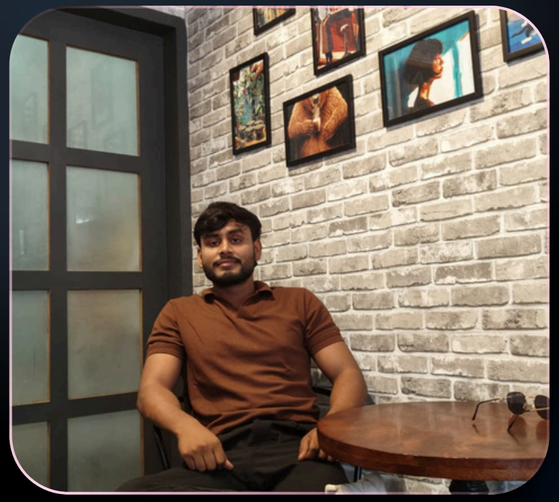
Manufacturing optimization

- Lower unit cost
- Improved margins

Cause → Effect Example

Improved endurance → higher mission success → stronger customer ROI → repeat contracts

Our Team



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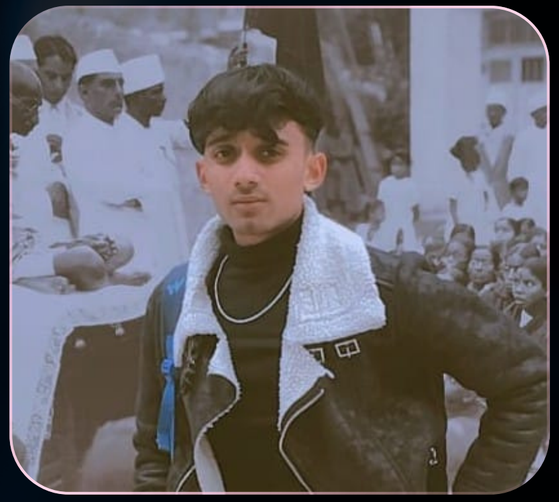

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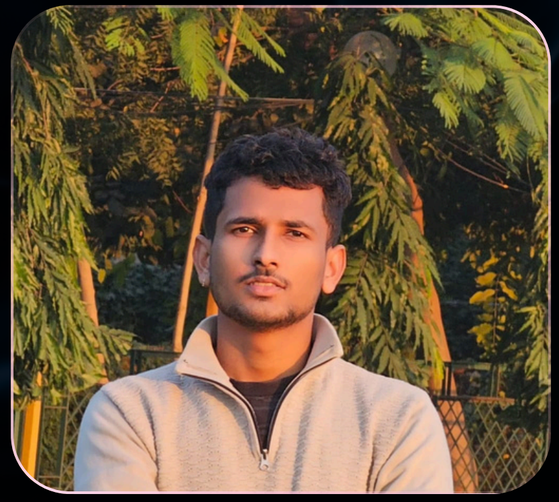

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Thank You

Let’s Create Something Amazing Together