HOSE-FED AERIAL FIREFIGHTING

AEBO AGNI RAKSHAK





Aerial firefighting, brought within reach.

A heavy-lift firefighting UAV + mobile ground-support vehicle for elevated and hard-to-access incidents.

Aebocode Technologies Pvt. Ltd.

Strategic & institutional pitch deck | October 2026

THE PROPOSITION

Aerial reach. Ground-fed suppression. One coordinated system.

Aebo Agni Rakshak is designed to extend firefighting reach while leaving the water supply on the ground.

WHAT IS BUILT

A heavy-lift UAV carrying a hose-fed water cannon/nozzle, paired with a mobile firefighting vehicle that supports deployment and connection to an external liquid source.

The vehicle has no onboard water tank. Water, firefighting foam or another compatible agent is fed from an external source through the ground-side system and hose.

80 m

DOCUMENTED AGL

Operating altitude in the heavy-lift configuration.

45 bar

MAX. SUPPLY

35 bar recommended in May 2026 technical data.

4 h

TETHERED CONFIG.

Endurance stated in the tethered configuration datasheet; validate final architecture.



Demonstration of the drone and integrated firefighting vehicle

THE CORE VALUE

Move the firefighting line to the fire - not the firefighter to the hazard.

A complement to conventional fire tenders, ladders and trained responders - not a replacement.

Sources: Aebocode Agni Rakshak and tethered technical datasheets, May 2026; company demonstration photographs.

THE PROBLEM

Fire response has a reach problem.

For some incidents, the critical gap is getting a controlled suppression line and useful visibility to the point of fire.

1

ELEVATED FIRE

Upper floors, façades and rooftops can sit beyond practical ladder or snorkel reach.

2

ACCESS CONSTRAINTS

Congestion, narrow lanes, terrain and hazardous sites may restrict positioning of ground assets.

3

LOW VISIBILITY

Smoke and heat can limit assessment of the fire face, hotspots and changing conditions.

4

RESPONDER EXPOSURE

Approaching a hazardous façade or industrial zone can place crews close to heat, smoke and structural instability.

WHY NOW

India's fire-service modernisation agenda includes specialist equipment and technology upgrades.

The Government of India announced a ₹5,000 crore scheme for state fire-service expansion and modernisation for 2021-22 to 2025-26. This is a policy signal, not funding allocated to Aebocode.

Source: Ministry of Home Affairs / Press Information Bureau, "Modernization of Fire Fighting Service", 6 Dec 2023 [1].

Ground-supplied liquid. Aerially positioned delivery.

A coordinated response model designed to add reach to existing firefighting infrastructure.

1 Mobilise

Deploy the drone and mobile ground-support vehicle near the incident.

2 Connect supply

Connect a hydrant, fire tender or suitable external supply to the ground-side pump / pressure interface.

3 Position aerially

Lift the hose/nozzle to the elevated or obstructed fire location while the operator remains on the ground.

4 Assess + suppress

Use live visual/thermal feeds to assess the scene and direct targeted discharge with trained responders.

DESIGN PRINCIPLE

Keep the liquid source on the ground; use the drone to deliver access and controlled reach.

The platform augments conventional crews and fire appliances; agent compatibility, pressure, flow and operating procedure must be confirmed for each deployment.

The vehicle is a ground-support hub - not a water tank.

Liquid supply, pressure management, aerial delivery and incident visibility are designed as a connected system.

01

EXTERNAL SOURCE

Hydrant / fire tender / compatible industrial supply

›

02

MOBILE GROUND UNIT

Vehicle, pump / pressure interface, hose management and operator support

›

03

HOSE + NOZZLE

High-pressure hose carries the selected compatible agent to the aircraft

›

04

AERIAL PLATFORM

Heavy-lift UAV, water cannon, EO / thermal sensing and flight control

LIVE EO / THERMAL VIDEO + TELEMETRY TO GCS / INCIDENT COMMAND

OPTIONAL TETHERED CONFIGURATION

A separate tethered configuration is specified for extended endurance; power architecture and operating conditions must be confirmed for the final configuration.

Source: Aebocode technical datasheets and product proposal. The vehicle is not described as carrying an onboard water tank.

One mission - configurable deployment envelopes.

The final quotation and acceptance criteria should be frozen against the selected vehicle, hose, pump, nozzle and flight configuration.



HEAVY-LIFT HOSE-FED

Aebo Agni Rakshak

STANDARD / HEAVY-LIFT

Up to 80 m AGL

120 kg MTOW in May 2026 datasheet; 35 bar recommended / 45 bar maximum ground supply; up to 20 min battery endurance stated.

MINI

Up to 50 m AGL

60 kg MTOW in July 2026 datasheet; 25 bar recommended / 30 bar maximum ground supply; up to 20 min endurance stated.

TETHERED CONFIGURATION

Up to 4 hours stated endurance

100 m tethered range in the May datasheet. Confirm the final power / hose arrangement and test conditions before publishing a guaranteed endurance figure.

The broader firefighting portfolio also includes a separate extinguishing-ball / surveillance concept; this deck centres on the hose-fed suppression platform.

Sources: Aebo Agni Rakshak (Tethered), May 2026; Aebo Agni Rakshak Mini, July 2026. Specs vary by configuration.

TECHNICAL SNAPSHOT

Heavy-lift performance, with ground-side supply.

Specifications from company technical documentation; use as configuration references until formal acceptance envelopes are frozen.

80 m AGL
Maximum operating altitude
Heavy-lift configuration

45 bar
Maximum ground supply
35 bar recommended

120 kg
Maximum take-off weight
May 2026 datasheet

2K + 12×
Day EO camera
3-axis gimbal; optical zoom

640×512
Radiometric thermal
Up to 6× zoom, datasheet

12 m/s
Wind resistance
Datasheet figure; conditions matter

LiDAR
Positioning support
LiDAR-based positioning

RTSP
Live video output
Multiple simultaneous devices

CONTROL + FAILSAFES

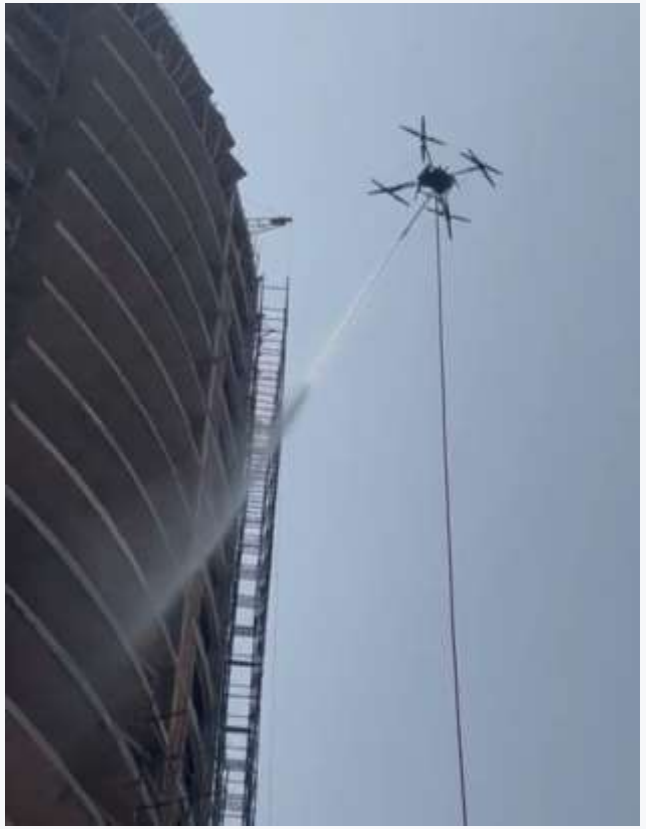
Manual / hover / waypoint / autonomous take-off and landing | Return-to-launch on communication loss or low battery | Beacon lights

Source: Aebo Agni Rakshak (Tethered), May 2026. Do not combine figures across variants without a configuration-specific test sheet.

FIELD EVIDENCE

The system has flown with a connected firefighting hose and discharged water at elevation.

Use these images as evidence of prototype development and field demonstration - not as a claim of completed certification.



HIGH-RISE /FACADE TRIAL



AERIAL WATER DISCHARGE



ELEVATED HOSE-FED FLIGHT

Company-provided demonstration photographs / videos. Internal test notes reference ~80 m AGL operation, ~40-bar pump configuration, ~20 min flight and water reach up to ~35 m laterally; test conditions should be documented in formal reports.

Institutional exposure across defence, government and industry.

Aebocode reports completed demonstrations in multiple regions; the next conversion step is structured user evaluation and procurement.





DEMONSTRATION / ENGAGEMENT AREAS

- Maharashtra / Mumbai
- Delhi and Uttar Pradesh
- Army Headquarters and Central Command
- Eastern Command
- Jindal Steel and other industrial stakeholders

Important distinction Demonstration and technical discussions establish exposure and feedback opportunities; they are not equivalent to procurement, formal acceptance or paid deployment unless separately documented.

Sources: Aebocode project records / user-provided demonstration material; company documentation records an Indian Army-requested demonstration with the vehicle at Malta Lines, Delhi Cantonment, 30 July 2026.

INITIAL USE CASES

Where an aerial hose can change the first minutes of response.

Aebocode's strongest initial wedge is where vertical reach, access or personnel exposure are the limiting factors.

01

HIGH-RISE / FACADE

Target upper floors, rooftop edges and fire-affected façade zones beyond practical ground-ladder reach.

02

INDUSTRIAL FACILITIES

Support response at steel, energy, warehouse and process sites where safe standoff and access are important.

03

CRITICAL INFRASTRUCTURE

Evaluate for airports, ports, utilities, large campuses and defence installations with specialised response plans.

04

WILDLAND / REMOTE ACCESS

Provide aerial observation and targeted support at terrain or vegetation-constrained incidents, subject to test envelope.

05

THERMAL ASSESSMENT

Identify and inspect hotspots with radiometric thermal imagery before, during and after visible suppression.

06

TRAINED RESPONSE TEAMS

Operate as a coordinated asset alongside incident command, conventional fire appliances and SOPs.

Deployment is application-specific: extinguishing agent, fire class, electrical hazards, access constraints, wind, and applicable operational approvals must be assessed by the end user.

MARKET OPENING

A developing global category; a clear Indian modernisation context.

Use broad-market forecasts as context, then build a bottom-up pipeline from qualified institutional sites.

GLOBAL FIREFIGHTING-DRONE MARKET

$1.32B
estimated 2026 market

$2.78B
forecast for 2033

9.8% CAGR (2025-2033)

Third-party estimate for the broader category; includes differing drone types and applications, not only hose-fed suppression.

INDIA: INSTITUTIONAL MODERNISATION

₹5,000 crore

Central outlay announced for state fire-service expansion and modernisation, for 2021-22 to 2025-26.

Not an Aebocode grant or an available product budget. Fire-service buying is state-led and procurement remains site / scheme specific.

ILLUSTRATIVE PLANNING SCENARIO

100 qualified sites × ₹1.2 Cr quoted single-system configuration ≈ ₹120 Cr potential hardware opportunity.

This is a company planning scenario based on one prior proposal, not an independently validated Indian SAM; price and volume vary by configuration.

Sources: Grand View Research, Firefighting Drone Market report (updated May 2026) [2]; Ministry of Home Affairs / PIB, 6 Dec 2023 [1]; Aebocode internal proposal scenario.

The architecture category is emerging internationally.

Aebocode should win through validated performance, integration quality, local support, and procurement readiness - not a "world first" claim.

BENCHMARK	PUBLICLY DESCRIBED APPROACH	IMPLICATION FOR AEBOCODE
Simhatel FireStriker Aerojet	Aerial-ground heavy-lift drone; ground vehicle connects to hydrant; tethered power and thermal feed.	Direct benchmark. Compete on Aebocode's demonstrated India-specific integration, operator workflow, serviceability and cost.
Foxtech T-FC100X	Vendor describes a hose-fed firefighting drone and separate tethered-power architecture for sustained spray.	Compare operating envelope, deployment time, pump compatibility, hose handling, safety case and total system cost under the same test protocol.
Aerorotors AB001 / AB002	Indian public material describes high-rise firefighting drone prototypes.	The category has local activity. Aebocode's advantage must be evidenced through repeatable demos, vehicle integration and institutional user feedback.
Aebocode Aebo Agni Rakshak	Heavy-lift hose-fed drone, external liquid source, mobile ground-support vehicle, EO/thermal and LiDAR positioning; demo footprint across India.	Prove end-to-end performance with acceptance metrics, user trial reports, service plan, pricing architecture and certification milestones.

Sources: Simhatel FireStriker Aerojet product page [3]; Foxtech T-FC100X product page [4]; Aerorotors public website [5]; Aebocode product records. Competitor specifications are vendor-published.

COMMERCIAL MODEL

System sales first; services expand lifetime value.

Build the offer around a deployment-ready system, then monetise integration, uptime and fleet support.

01

SYSTEM SALE

Hose-fed drone, GCS, hose/nozzle interface and configuration-specific deliverables.

PRIMARY REVENUE

02

GROUND-UNIT INTEGRATION

Vehicle integration, pump/pressure interface, connectors and adaptation to existing fire appliances or hydrants.

PROJECT / OEM REVENUE

03

TRAINING + COMMISSIONING

Operator training, deployment drills, operating SOPs and customer-specific setup.

DEPLOYMENT SERVICES

04

LIFECYCLE SUPPORT

AMC, spares, batteries, hose/nozzle replacement, calibration and configuration upgrades.

RECURRING POTENTIAL

Pricing principle Quote to a frozen configuration and volume - do not treat legacy proposals as a single universal ASP.

Turn demonstrations into repeatable procurement.

Institutional adoption is a proof-and-process sale: technical validation, user fit, budget route, then lifecycle support.

1

FIELD DEMO

Show aerial reach and continuous hose-fed discharge using the buyer's operating scenario.

2

JOINT EVALUATION

Agree a test sheet: height, pressure, throw, flow, hover stability, deployment time and fail-safes.

3

PILOT / TRIAL

Run a controlled site pilot with fire service / industrial safety teams and documented acceptance criteria.

4

PROCUREMENT

Support vendor registration, technical bids, applicable permissions and tender / purchase documentation.

5

DEPLOY + SUPPORT

Commission, train operators, stock spares and execute maintenance / fleet-expansion plans.

INITIAL BEACHHEAD

Municipal fire services + high-risk industrial sites where height, access and continuous supply are practical buying triggers.

Expand to ports, airports, utilities, defence installations and multi-site industrial fleets after repeatable validation.

From demonstrated prototype to repeatable deployment.

Proposed workplan; exact timing depends on partner access, final product configuration, test facilities and applicable certification requirements.

NOW

CONFIGURATION FREEZE

Freeze drone / hose / nozzle / pump / ground-vehicle interfaces; create risk register and test plan.

0-6 MONTHS

ENGINEERING QUALIFICATION

Repeat pressure-flow, height, hose-drag, hover-stability and emergency-recovery testing.

6-12 MONTHS

INDEPENDENT VALIDATION

Environmental, structural, electrical / EMI-EMC and fire-system testing; document safe limits.

12-24 MONTHS

USER TRIALS + SCALE

End-user trials, SOPs, training, applicable approvals, production documentation and pilot deployments.

SUCCESS GATES Repeatability | Safety case | End-user acceptance | Certification / approvals as applicable | Production QA + support

Roadmap is a proposed plan informed by Aebocode's 2026 commercialization / qualification documents; it is not a promise of certification dates.

Engineering, entrepreneurship and firefighting-domain experience.

Aebocode Technologies Pvt. Ltd. was founded in March 2022 and develops indigenous UAV systems for specialised operating environments.

PANCHKULA, HARYANA

Indigenous UAV design, manufacturing, integration and application-specific product development.

Focus areas

Defence | Emergency services | Industrial applications | Specialised drone systems

Sharad Khanna

FOUNDER & DIRECTOR

Company leadership, product strategy and commercialisation.

Manish Dham

DIRECTOR

Technology entrepreneurship, venture building and partnerships.

Sahibir Singh

CHIEF TECHNOLOGY OFFICER

M.S. Aerospace; 30+ years in multirotor / fixed-wing UAV technology, R&D and system engineering.

Col. Sarthak

FIREFIGHTING SYSTEMS CONSULTANT

Former Army officer; 8+ years of firefighting-industry experience and end-user requirements.

Core execution spans UAV / mechanical design, avionics, payload and hose integration, ground-control systems, manufacturing and flight testing.

The next step is a structured path to deployment.

Aebocode is seeking partners who can accelerate qualification, user validation and scale-up of the integrated aerial-ground firefighting system.

01

END-USER TRIAL SITES

Fire departments, industrial fire teams and high-rise operators for structured, measured trials.

02

FIRE-SYSTEM INTEGRATION

Pump, hose, nozzle, coupling and external-supply partners to standardise safe interfaces.

03

MANUFACTURING + QUALITY

Production engineering, sourcing, assembly QA, field service and spares capability.

04

INSTITUTIONAL ACCESS

Help convert demonstrations into user evaluations, technical specifications and procurement pathways.

05

QUALIFICATION + IP

Support for repeatability testing, safety evidence, IP strategy and applicable certification / approvals.

THE OUTCOME

A repeatable, supportable and procurement-ready Indian aerial firefighting system.

Commercial terms, funding requirement and rollout quantities should be defined jointly against a time-bound qualification and pilot plan.



Product and demonstration images supplied by Aebocode

A safer line of sight.
A longer reach.

Aebo Agni Rakshak brings aerial access, ground-fed suppression and live scene awareness into one coordinated firefighting system.

LET'S BUILD THE DEPLOYMENT PATH TOGETHER

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