CELESTE

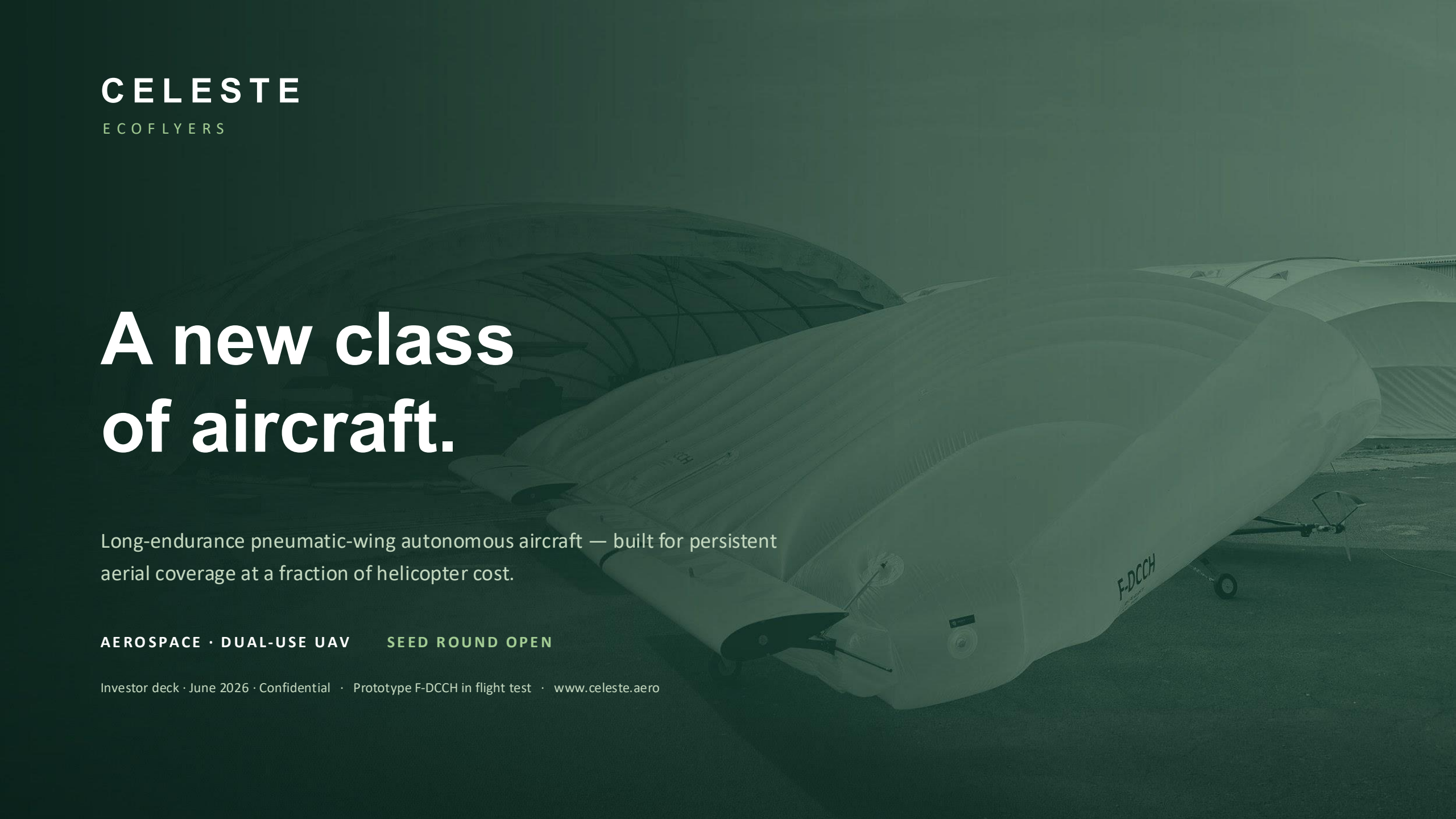
ECOFLYERS

A new class of aircraft.

Long-endurance pneumatic-wing autonomous aircraft — built for persistent aerial coverage at a fraction of helicopter cost.

AEROSPACE · DUAL-USE UAV **SEED ROUND OPEN**

Investor deck · June 2026 · Confidential · Prototype F-DCCH in flight test · www.celeste.aero



WHY CELESTE EXISTS

Make the sky an affordable infrastructure layer.

Critical infrastructure, energy, emergency response and defense increasingly need aircraft overhead for hours — not minutes, and not at helicopter cost. The constraint is no longer the sensor. It is the cost, energy and infrastructure of staying airborne.

The question we set out to answer:

How do you keep an aircraft useful overhead for hours, without burning fuel, crew or runway to do it?

OUR ANSWER

Reduce the aircraft, not the mission.

A pressurised textile wing carries the same payload on a fraction of the structure and energy — turning hours of aerial coverage from an exception into something routine.

THE PROBLEM

Persistent aerial coverage is still too expensive to use routinely.

When an operator needs hours of presence over a remote asset, every option today is a compromise.

$1,000–3,000

PER FLIGHT-HOUR

Going rate for a single crewed aeroplane or helicopter inspection flight — before crew, fuel and repositioning.

15–25%

OF FLIGHTS GROUNDED

Share of scheduled helicopter inspection flights lost to weather windows and pilot availability.

~$30M

PER ISR DRONE

Defence flies routine surveillance with Reaper-class UAVs — air forces are now seeking cheaper, simpler ISR platforms.

Same gap, two markets. Civil infrastructure and defence both need aerial coverage that is cheaper, easier to deploy and less fragile than today's options.

Coast guard vessel. Small boats beyond the horizon.

Today a 360° camera gives wide coverage, but little detection value at sea. Small craft disappear in glare, waves and distance. A crewed asset or helicopter may be needed to investigate, with limited endurance and higher exposure.

With Celeste a folded dAS10 is stored onboard, launched from a compact deck, climbs above the ship, carries a 20 kg-class maritime radar for hours, and returns slowly. The mission becomes persistent radar coverage, not a short visual patrol.

Mission logic: lift the sensor above the ship, keep it airborne longer, recover it safely on a constrained deck.

WHAT CHANGES

Radar height

extends maritime line-of-sight beyond the ship horizon

20 kg payload

carries a compact maritime radar, not only cameras

Ship storage

8 m inflatable airframe folds into limited onboard space

Slow recovery

lower-speed deck approach with an impact-tolerant structure

A pneumatic wing changes the equation.

The dAS10 replaces the rigid composite wing with a pressurised textile envelope. Lift is aerodynamic, not buoyancy — a fixed-wing aircraft, not a blimp. We don't add batteries; we remove mass.

1

Large lifting surface, minimal weight

Endurance comes from wing area, not from heavy structure or fuel.

2

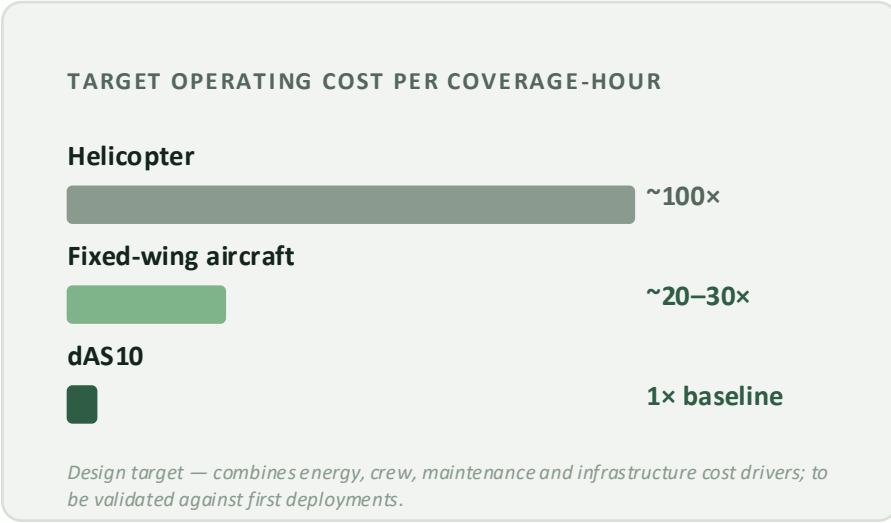
Slow, stable, autonomous

Low cruise speed cuts energy per kilometre and de-risks every landing.

3

Foldable & field-repairable

Transports in a standard vehicle; deploys from a rooftop-sized surface.



WHY NOW

— Operating costs for crewed aerial work have outpaced inflation (2024–26).

— EASA Specific Category opens a route for long-range autonomous flight.

— Technical-textile and battery performance crossed the viability threshold.

THE PRODUCT — dAS10

Built light. Built to stay up.

8.1 m	6 h	~300 km	20 kg+	80 kg	F-DCCH
Wingspan	Endurance · target	Single-leg range · target	Useful payload · target	Max take-off weight	Registered prototype

Patent filed on the pneumatic-wing architecture — aerofoil profile derived from a wind-tunnel-validated database. Foldable · rooftop take-off · glide-safe on power loss.

WHERE WE ARE

In flight test — and honest about what comes next.

dAS10 F-DCCH · Le Havre · 22 May 2026

PROVEN THIS YEAR

✓ Prototype built & registered

Entered the French civil aircraft register as F-DCCH (Q1 2026).

✓ First airborne flight — 22 May 2026

Under power, the aircraft lifted off and sustained a short airborne phase before touchdown. Sustained endurance and full envelope remain to be demonstrated.

✓ Solar Impulse Efficient Solution label

Independent third-party recognition of the efficiency case.

ROADMAP · TRL PATH

Q1 2026	22 May 2026	H2 2026	2027 H1	2027 H2	2028–29
TRL 5		TRL 6		TRL 7	TRL 8
Prototype registered	**First airborne flight**	Controlled flight envelope	EASA ops authorisation	First paying pilots	Pre-series → Series A

Two founders. One aircraft.

Six months ago this was a TRL-3 concept. Today it is a registered aircraft in flight test — the clearest evidence this team executes. Founded 2025 · Le Havre, France.

Olivier Manette

FOUNDER & CEO

licensed Light Sport Aircraft pilot and flight Instructor PhD computational neuroscience (Sorbonne / UPMC), engineer (CNAM),. Previously founded and led a deeptech company building IoT + AI systems for structural monitoring of industrial infrastructure to TRL 9.

Benjamin Degasne

CO-FOUNDER & CTO

Textile engineer (ENSAIT), ~20 years R&D in pneumatic structures and technical textiles. Runs an independent engineering practice — 50+ products to market, multiple patents, CES Innovation Award 2026, Lépine Gold 2023. Designed the dAS10 wing.

CTO'S ENGINEERING PRACTICE HAS DELIVERED FOR — prior client work, not Celeste partnerships

Airbus **Air France** **Hutchinson** **GE** **Stellantis** **LVMH** **Floatee**

Two buyers. Three entry verticals. One platform.

Civil and defence are the two buyer types; we enter through three verticals. Beachhead in offshore-wind O&M and infrastructure inspection, where our pipeline sits today; defence ISR is the strategic expansion. Verticals sized from the Starburst market study.

TAM
$49.5B
DRONE SERVICES & LOGISTICS

SAM
$8.9B
TARGET VERTICALS

SOM
$4.9B
EU + US REACHABLE

SERVED MARKET — BY SEGMENT · 2030

Offshore wind O&M	CIVIL · BEACHHEAD	**$3.76B** CAGR 17.6%
Infrastructure & remote logistics	CIVIL	**$1.8B** CAGR 22.2%
Defence UAV / ISR-adjacent	DEFENCE · UPSIDE	**$3.3B** CAGR 11%

2030 projections (USD). Source: Starburst market study, 2025; TAM/SAM/SOM rebuilt bottom-up from segment detail (SOM = 55% EU+US share). Figures sit in the broader drone-services market; persistent-coverage / ISR re-sizing is in progress.

GO-TO-MARKET

Land through operators who already fly.

Sell first to companies that already hold the customers, the pilots and the regulatory footing — then widen.

PHASE 1 — 2026–27

Drone operators

Sell to operators already running inspection and surveillance contracts. ROAV7 partnership provides premises, test pilots and live customer use-cases in energy and pipelines.

PHASE 2 — 2027+

Defence via primes

Reach defence through approved primes and integrators rather than direct tenders — they already carry the certifications and the long approval cycle.

PHASE 3

Approved supplier

With certifications and a flight record in hand, become a directly approved supplier and sell into programmes.

EARLY PIPELINE

SIGNED PARTNERSHIP

ROAV7 — operator, test pilots, access

LETTERS OF INTENT

3 LOIs — non-binding, demo-gated

QUALIFIED PIPELINE

€8M across 3 operators

COMPETITION

Everyone has competition. Here is where we win.

Operators don't just want a cheaper drone — they want hours on station with a useful payload. A €7k multirotor flown in relays cannot hold an asset for hours carrying real sensors.

	ENDURANCE	RANGE	PAYLOAD	COST / COVERAGE-HR	DEPLOYABILITY
dAS10 — pneumatic wing	**6 h***	**~300 km***	**20 kg+***	**Low (target)**	**Foldable · rooftop**
Crewed helicopter / aircraft	2–4 h	300–600 km	High	Very high	Crew, fuel, airfield
DJI-class multirotor (~€7k)	~45 min	15–25 km	< 2 kg	Low but relay-bound	Easy, range-bound
Rigid-wing long-endurance UAS	3–8 h	100–200 km	2–10 kg	High	Catapult / runway

Product moat

Patent filed; the aerofoil profile comes from a wind-tunnel-validated database — pneumatic-wing know-how is hard to replicate, even where the idea is not.

Distribution moat

Exclusivity clauses with operator partners lock acquisition channels before larger players move.

** dAS10 figures are design targets, not yet demonstrated. Comparator ranges from public manufacturer specifications (2025–26).*

Three revenue lines, one strategic platform.

Hardware opens the relationship; mission-hour revenue compounds it; defence and aerospace licensing can turn the aircraft into a strategic platform.

01

Aircraft sales

FROM 2027

Direct sales of the dAS10 to drone operators and surveillance authorities, starting with pilot customers.

One-off · capital

02

Mission-hour pricing

RECURRING

Coverage sold as a service to operators, benchmarked against current helicopter rates.

Recurring · margin

03

Licensing

LONGER-TERM OPTION

Pneumatic-wing architecture licensed to defence and aerospace primes — optionality, not in current projections.

Asset-light

The honest view.

Every hardware deeptech faces these. Our job is to bound and finance them deliberately — not pretend they're absent.

Commercial — first customers slip

Risk Pilots delay 6–12 months or pull back.

De-risk We qualify multiple first customers in parallel (3 LOIs, €8M pipeline); no single account gates revenue. Demos convert on operational data, not promises.

Technical — flight envelope unproven

Risk Endurance and control at full payload not yet demonstrated.

De-risk Incremental, gated flight-test campaign; glide-safe architecture; TRL 5→8 mapped to dated builds.

Competitive — a prime copies the mission

Risk A prime designs around the IP.

De-risk Patent + wind-tunnel database; operator exclusivity; speed and cost structure hard to match even around the patent.

Supply chain — sovereignty

Risk Textiles, batteries, avionics concentrated or non-EU.

De-risk European sourcing where possible, dual-sourcing, payload-agnostic architecture, cyber roadmap for C2 / data links.

Revenue ramp and the EBITDA turn.

Single base case driven by aircraft sales and mission-hour services. EBITDA turns positive in Year 3 (2028). Full model available in the data room.

MODEL HIGHLIGHTS

EBITDA-positive from
2028 · Year 3

2031 revenue
€35M

2031 EBITDA
€10M · ~29%

Gross margin
45% → 60%

Recurring revenue, 2031
~44%

Aircraft base price
~€150k platform

Base case; assumptions in Appendix A.

THE ASK

€2.5M Seed to turn flight tests into paid deployments.

RAISING

€2.5M

Instrument **SAFE / BSA-AIR (flexible to lead)**

Valuation **set with lead — *cap to confirm***

Committed ***[€X — confirm]***

Status **Founded 2025 · *JEI/JEIR in progress***

USE OF FUNDS

Flight test, certification & EASA pathway	30%
Team — founders, pilots, regulatory, sales	28%
R&D, prototype iteration & production tooling	25%
Go-to-market, demos & partnerships	10%
G&A & contingency	7%

WHAT €2.5M UNLOCKS — THE NEXT FUNDABLE MILESTONE

- ✓ **Pilot deployments live**
- ✓ **Real mission-hour cost data**
- ✓ **Defence pipeline qualified**
- ✓ **Series A readiness**

Return path paid deployments → Series A or strategic interest from aerospace, defence and infrastructure players.

Celeste Ecoflyers · www.celeste.aero · contact@celeste.aero VivaTech 2026 · booth 2C32-001 · 17–20 June, Paris