SWORDSTONE & KNOWSTONE

Investor Overview

ONE COMMON PROBLEM · ONE SOLUTION · DUAL-USE BY DESIGN

PREPARED BY Hydaspes Group Ltd

FOUNDER Dan Lansley

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STATUS Commercial Sensitive — Recipient Only

00 — Overview

Predictive, real-time human telemetry for the warriors of the West.

Zero hardware additions. Zero procurement delay.

Swordstone runs on the wearables your operators already carry and reports into the C2 stack you already run. No new kit to certify, no new procurement line to fight for — just individualised, real-time physical and cognitive state, the moment you switch it on. The same engine, re-priced and re-positioned, trades under a sibling name, Knowstone, for industry, fire & rescue, and the civilian outdoor/expedition market.

3 Tiers	70K–105K	4	2026–27
Free · Pro · Per Diem	**SOF Beachhead**	**Core Engines**	**Structured Rollout**
Free · £20–30/mo · £2/day	2–3% of 3.5M NATO troops	One dual-use architecture	Pre-launch, seeking design partners

Swordstone/Knowstone OS is pre-launch software, developed by founder Dan Lansley. It exists because the founder personally hit the gap it solves — in the field, not as a market hypothesis. This overview repackages the live investor site (swordstone.tech) with the current funding round attached.

01 — A Letter From the Founder

Why now?

Dear Potential Investor,

In Summer 2026, a troubling occurrence at the Royal Military Academy Sandhurst highlighted the need for a system with precision individual biometric and environmental risk management capabilities such as Swordstone OS.

The latest commissioning course at RMAS was unable to conduct physical, tactical, and other vital training for over five weeks due to organisational aversion to heat injury casualties. This is with good reason. After three candidates on the selection course for UKSF died in July 2013, the UK MoD reviewed its policies and similar deaths have not been repeated. However, this has come at the expense of training.

The United Kingdom is on the precipice of war. All risks that are not taken in training are transferred to operations, against which a peer nation is our anticipated adversary. We are trading safety today, for vulnerability tomorrow.

With precision individualised risk management and decision support, Swordstone OS can facilitate Defence to conduct safe training in extreme conditions. By allowing Defence to fully expose troops in training to the harshest of conditions, they are best prepared for war.

This is just one of the many use cases for this product. Thank you for considering investing not just in our company, but the capability of our Armed Forces and Allies.

Dan Lansley
Founder

Why not just defence?

Dear Potential Investor,

In May 2026, while directing a technical-validation expedition on Mount Everest for a previous company, I had real-time visibility into my hardware's status via my partner's geo-verified software — and no equivalent visibility into my own team. The hardware was instrumented. The people weren't. That gap is what led me to build Knowstone OS.

That gap isn't unique to a mountain, and it isn't unique to defence. I've since spoken with contacts in the Fire Service, Search & Rescue, and other first responders. The pattern repeats. People who operate in genuinely extreme conditions — fires, mountain and remote rescues, callouts in weather no sensible person would choose — with next to no individualised, real-time read on the physiological state of the people doing the work, or those in their care. Command and control decisions are made largely on experience and individual judgement, not data.

The market this sits inside is real and sized. Berg Insight puts the global lone-worker population at roughly 53 million across Canada, the US, and Europe alone. Verified Market Research values the global lone-worker safety solutions market at $10.1B in 2023, growing to $17.14B by 2031. On the professional guiding side, the IFMGA counts over 6,000 certified mountain and expedition guides worldwide — before counting the much larger recreational and expedition mass market beneath them.

With precision individualised risk management and decision support, Knowstone OS gives fire crews, SAR teams, professional guides, recreational users, and industrial lone workers the same thing Swordstone OS gives Defence: an accurate, real-time picture of who is actually able to keep going, and who needs to stop, before that decision is made for them by a casualty.

Dan Lansley
Founder

02 — Capabilities

One physiological engine. Four operational views.

Each engine runs on the same live environmental and biometric pipeline, so a change in one place — a temperature reading, a casualty's status — updates every view that depends on it.

LIVE TELEMETRY

Every operator, one screen, in real time.

Multi-operator monitoring — heart rate, SpO2, core temperature, impact/IMU events, a live cognitive-load estimate, and a composite Human Factors risk badge that rolls all of it into a single status per person. Designed for rapid triage at squad-scale without overwhelming the commander.

PREDICTIVE MODEL

Forecasts operational runway before it runs out.

Altitude, ambient temperature, wind, UV, humidity and WBGT feed a forecast of operational runway, cognitive capacity, caloric need and hydration demand — combined with loadout, exertion, sleep debt, acclimatisation and clothing state.

GEOSPATIAL CIP · defence: G.U.A.R.D.I.A.N.

One map. Every operator's fix confidence.

Tactical map with day, night, topographic and bathymetric layers. Every position carries a live GNSS confidence badge. Exports via Cursor-on-Target (CoT) into ATAK and existing C2 nodes.

INCIDENT DASHBOARD · defence: A.N.G.E.L.

Five-phase recovery lifecycle. Not a static alert.

Structured around the doctrinal Personnel Recovery lifecycle (FM 3-50): Report, Locate, Support, Recover, Reintegrate, with M.A.R.C.H., Z-MIST and 9-Liner CASEVAC/J1 NOTICAS drafting bound live to the open record.

03 — Defensibility & Provenance

Dashboards are easy to copy. Ground-truth calibration is not.

Anyone can download a medical manual and hardcode a static threshold into a dashboard. Swordstone's defensibility lies in what happens next: we take those static textbook baselines and dynamically calibrate them against two proprietary pillars.

1. THE VaaS DATA FLYWHEEL

Elite Environmental Validation

Competitors build algorithms in labs. We validate ours in the Death Zone. Our Validation-as-a-Service (VaaS) expeditions harvest raw, ground-truth physiological data from elite operators in Antarctica, the Atlantic, and K2. This proprietary data refines our engines under extreme stress that others simply cannot replicate.

2. INDIVIDUALISED RISK

The Human Factors Database

Individualised risk management requires individualised reference data. Swordstone cross-references doctrinal models against an operator's individual baseline — age, VO2 max, acclimatisation, and medical history. We don't just alert when a threshold is crossed; we shift the threshold in real-time based on the specific human wearing the sensor.

Domain	Source	Note
Heat Strain / WBGT	USARIEM TB MED 507 (US) · UK Def Stan / JSP 375 (UK)	Heat category, work/rest cycle and fluid ceiling banding.
Cold-Water Immersion	US Navy Diving Manual · Royal Navy BR 2806 (UK)	Immersion staging, no-decompression limits, PPO2.
Altitude / Hypoxia	WMS 2018 Lake Louise Score · FAA Time-of-Useful-Consciousness tables	AMS scoring and HACE red-flag criteria.
Freezing Injury	NATO COE-CWO time tables (Five Eyes / NATO)	Time-to-cold-injury, wind- and clothing-adjusted.
Sub-Terranean / Confined Space	US Army ATP 3-21.51	Confined-space and low-visibility exposure tracking.
Personnel Recovery Lifecycle	US Army FM 3-50	Report, Locate, Support, Recover, Reintegrate structure.
Canine Thermal	DoD Military Working Dog Veterinary Service	Species-specific heat casualty thresholds.
Acoustic Dosimetry	UK Def Stan 00-27 / US MIL-STD-1474E (defence) · UK HSE / US OSHA (civilian)	Continuous dB(A) and impulse dB(C) peak banding.
CBRN	UK Dress States / JSP 375, STANAG 2499 (NATO)	Threat-level-linked PPE and exposure guidance.
Doctrine Sovereignty	Five Eyes (UK, US, Canada, Australia, New Zealand) reference sets	Selectable national doctrine set per deployment.

The end user has total control of their data origin, secure hosting location and destination, with reference and hosting of data selectable by sovereign classification or global best practice.

Why acoustic dosimetry, and why now? — Defence

The UK Ministry of Defence has confirmed over £360 million paid in common law compensation for hearing loss claims since 2003 — roughly £110 million before the Tactical Hearing Protection System rolled out in 2015, and over £250 million since. An estimated 300,000 UK veterans carry noise-induced hearing loss or tinnitus.

Swordstone's Acoustic Load tile turns that exposure into a documented, per-operator, real-time record; this is a duty-of-care instrument that also happens to be the cheapest hearing-loss litigation defence a defence or industrial buyer can put in place.

Why acoustic dosimetry, and why now? — Civilian / Industry

In the US alone, OSHA estimates businesses pay more than $242 million annually in workers' compensation claims for noise-induced hearing loss, alongside regulatory penalties exceeding $161,000 per willful violation. In the UK, hearing loss claims represent one of the largest personal injury payout liabilities under Employers' Liability (EL) insurance.

Knowstone's Acoustic Load tile turns workplace noise exposure into an indisputable, per-worker real-time record. For an industrial HSE lead, preventing just one fraudulent or unmitigated hearing-loss claim pays for the entire platform across the workforce.

What we deliberately did not build.

We didn't build a competitor to existing Command & Control (C2) software. Swordstone OS is an additional layer to whatever C2 or data aggregation stack a customer already runs. Exporting to ATAK via Cursor on Target, Swordstone OS is compatible with your software and sensors.

04 — Deliberately Narrow. That's the point.

We are not an infrastructure company. We are an intelligence company.

Swordstone OS (Phase 1) is software only — sensor- and comms-agnostic. It's built to plug into whatever hardware, network or C2 stack a customer already runs, not to compete with it or wait on their next procurement cycle. Once the software is embedded, trusted, and generating revenue at £30/operator/month, Phase 2 introduces our proprietary low-SWaP tactical sensor array as the natural upgrade path — not a hard sell.

NOT

A C2 Replacement / A Data Integration Replacement

Defence: Swordstone feeds an existing operating picture via Cursor-on-Target (CoT). It doesn't try to become one. Civilian: Knowstone can be used standalone, or feed an existing HSE dashboard, site-control system, or SAR coordination tool.

NOT

Heavy Hardware Resellers

No 25kg Pelicases. No reselling commercial hospital monitors. We leverage COTS wearables today, and next-to-skin biometric patches tomorrow.

NOT

Reactive Telemedicine

Effective planning before an incident happens always beats reactive contingencies. Calculate the operational limits before failure occurs.

The Strategy: Software Beachhead, Hardware Lock-In — Defence

Phase 1 is the Trojan Horse: with zero new hardware, there is no procurement committee to fight and no CAPEX to justify — a unit lead can approve it. That gets us inside the organisation, their safety workflows, and inside the data. Phase 2 doesn't have to win a cold sales pitch; it only has to be the obvious next step for a customer who already depends on us.

The Strategy: Software Beachhead, Hardware Lock-In — Civilian / Industry

Phase 1 is the Trojan Horse: at £20-30/operator/month with potentially zero new hardware, there is reduced procurement friction and minimal CAPEX to justify. This gets us inside an organisation, inside the safety workflow, and inside the data. Phase 2 doesn't have to win a cold sales pitch against incumbents; it only has to be the obvious next step for a customer who already depends on us.

Phase 2: Proprietary Hardware Build

The capital-intensive build, funded by a priced round or DIANA/DASA scale funding once the software (Phase 1) has proven demand.

Flexible Biometric Sensor Patch

5mm sealed dimensions, matte black PU outer shell · dry microvolt ECG electrode array & AFE · multi-axis IMU for blast/impact detection · IP67 rated, breathable bio-adhesive base.

Tactical Data Node

128GB flash memory to prevent cold-induced data loss · built-in barometer, temperature, and humidity sensors · Sub-GHz, 2.4GHz, BLE, and LoRa for degraded RF environments · IP68 ruggedized casing, MOLLE mounted.

05 — Case Studies

Illustrative scenarios, grounded in real gaps — not yet a completed deployment.

Swordstone/Knowstone OS is pre-launch: no field deployment exists to report on yet. What follows are two scenarios built from real, already-disclosed facts — a documented training gap, and the founder's own field experience — showing precisely what this platform would have changed had it been running.

Defence — Resuming high-risk training without the blind spot.

Had Swordstone OS been running across the latest commissioning course at RMAS, directing staff would have had individualised heat-strain thresholds per candidate — not a single population-average cutoff forcing a blanket stand-down. Candidates with genuine tolerance keep training; candidates trending toward risk are flagged and pulled individually, before the threshold is crossed.

Illustrative scenario built from a real, publicly-acknowledged training gap. Not a completed Swordstone deployment — no field case-study data exists yet, because the product is pre-launch.

Civilian — The gap that became Knowstone.

In May 2026, while delivering a technical-validation expedition on Everest for a previous company, founder Dan Lansley had real-time visibility into his hardware's status via Labrys Technologies' geo-verified software — and no equivalent visibility into his own team. The hardware was instrumented. The people weren't.

Had Knowstone OS been running, the expedition lead would have had the same continuous, individualised telemetry on his teammates as he did on the kit — surfacing a fatigue, altitude, or cold biometric trend early enough to act on it, rather than discovering it only once someone was already in trouble.

Illustrative scenario built from the founder's own real field experience. Not a completed Knowstone deployment — no field case-study data exists yet, because the product is pre-launch.

06 — Roadmap & Traction

The Expedition Data Moat

Hydaspes Group has direct, founder-level access to an active roster of extreme-environment expeditions across 2026–2028. Disclosed here to show the data capture moat behind Swordstone OS — these are Hydaspes Group's expedition and research partnerships, not yet confirmed Swordstone deployments.

Start	Expedition	Window	Team	Environment
Jun 2026	K2 — No Supplementary Oxygen	Prep Jun 2026–May 2027, Summit Jun 2027	Rupert Jones-Warner (UK) — record-setting mountaineer, Everest double-summit and FKT holder	Death Zone, no supplementary oxygen
Nov 2026	Atlantic Row — World's Toughest Row	Nov 2026	RogueWave: Magee, Jallans, Hogan, Vardigans (UK/USA)	4,800km unsupported speed-record attempt, Canary Islands to Antigua
Nov 2026	Antarctica — Solo Coast-to-Pole	Nov 2026–Jan 2027 (initial); Nov 2027–Jan 2028 (secondary)	James Benson-King (UK) — endurance athlete, Guinness World Record holder	1,000km solo, unsupported, complete isolation
Nov 2026	Antarctica — Ski to Pole	Nov 2026–Jan 2027	Max Worsley (UK) & Martin Nesse (Norway); patronage of HRH The Prince of Wales	1,349km unsupported ski crossing
Jan 2027	High North — Avalanche Patrol	Jan–Mar 2027	NATO specialist end-user group, with Safeback (Norway)	Long-range high-latitude patrolling, avalanche survivability tech
May 2027	Everest — Double Summit “Further: Faster”	May 2027	Garth Miller (UK) — former Special Forces officer, high-altitude mountaineer, airline captain	Fastest-ever double summit via North and South sides
May 2027	Everest — BASE Jump World Record	May 2027	Josh Bregmen (NZ) — world-record BASE jumper, former British Army EOD specialist	Attempt at the world's highest BASE jump, from the Death Zone

Pre-Launch — Built From a Problem the Founder Lived Firsthand

Swordstone and Knowstone OS are a working product build, not yet field-deployed as a commercial subscription. It exists because the founder personally hit the exact gap it solves — not as a market hypothesis, but in the field.

In May 2026, while working with a different company, Dan Lansley led a project on Mount Everest with a team of former UK Special Forces operatives and Labrys Technologies, using Labrys' secure geo-verified software to attempt to verify the world's first BASE jump from the summit of Everest. The physical world-record attempt was unsuccessful due to extreme weather — but the technical outcome was fully achieved: the deployment validated Labrys' in-development hardware and software under maximum thermal and atmospheric stress.

Dan had real-time visibility into his hardware's status and none into his own team's. That gap is what led him to found Hydaspes Group and build Swordstone. This experience predates Hydaspes Group Ltd's incorporation and was executed under a different company; it is founder-level field experience, not a claim that Hydaspes Group or Swordstone itself has been field-tested to date.

07 — Market & Model

Three tiers, one platform.

A gated free tier, a defence/industry subscription, and a per-diem rate for the field — each priced and gated for how that buyer actually uses the platform.

FREE

Up to 5 users

Heart-rate and GNSS location only — built for the recreational outdoor mass market. Defence access is separately gated behind a verified @mod.gov.uk / DoD / national-defence email — not a public sign-up.

PRO — £20–30 / USER / MONTH

Standing infrastructure

All engines and agentic triage workflows unlocked. £30/user/month for Defence and Civilian guide/SAR, £20/user/month for Industry, reflecting the competitive lone-worker-safety price ceiling in our market benchmarking.

PER DIEM — £2 / PERSON / DAY

Capped at 15 days/year

Full coverage priced by the deployment day, not the year — capped at £30/person/year maximum. Built for individual climbers, hikers, and expedition members who want full coverage for the handful of days a year they're actually in the field.

Beachhead & TAM by Domain

Four domains, four go-to-market motions: Defence on the Pro tier via NATO SOF, Industry on the Pro tier via high-hazard lone-worker sectors, Fire Service on the Pro tier via London Fire Brigade and commercially funded fire and rescue services, Civilian on a blended motion — professional guides and SAR teams on Pro, the recreational/expedition mass market on Free and Per Diem.

DEFENCE BEACHHEAD (PRO)

70,000–105,000

2–3% of an estimated 3.5M NATO active troops (NATO SOF) — the priority near-term defence market.

DEFENCE TAM

£1.26B

Long-run ceiling if Pro-tier pricing were extended across all ~3.5M NATO personnel. A later-stage expansion, not the near-term plan.

INDUSTRY BEACHHEAD (PRO)

~530K–1.06M

Illustrative 1–2% of Berg Insight's ~53M lone workers across Canada, the US, and Europe, weighted toward high-hazard sectors.

INDUSTRY TAM

$10.1B–$17.1B

Verified Market Research values the global lone worker safety solutions market at $10.1B (2023), growing to $17.14B by 2031 (15.1% CAGR).

FIRE SERVICE BEACHHEAD (PRO)

~4,729

London Fire Brigade's full uniformed operational establishment — the natural flagship design-partner target ahead of wider UK FRS rollout.

FIRE SERVICE TAM

$2.4B–$7.7B

DataIntelo values the global First Responder Wearables market at $2.41B (2024), growing to $7.69B by 2033 (13.7% CAGR).

CIVILIAN BEACHHEAD

~7,000+

IFMGA counts ~6,000–7,000 certified mountain/expedition guides worldwide (Pro-tier revenue) — before the recreational/expedition mass market this anchor doesn't size.

CIVILIAN TAM

$7.0B–$23.1B

Grand View Research values global sports analytics at $7.0B (2026), growing to $23.1B by 2033 (18.5% CAGR) — the closest sized proxy for expedition/outdoor performance tech.

Math shown, not hidden: 3,500,000 troops × 2–3% SOF share = 70,000–105,000 operators · ×£30/mo ×12 = £25.2M–£37.8M Defence ARR ceiling at full SOF-beachhead penetration · 53M lone workers ×1–2% high-hazard share = ~530,000–1.06M Industry beachhead · 44,963 UK FRS personnel ×£20/mo ×12 = £10.8M Fire Service ARR ceiling at full UK FRS penetration. These are founder-supplied assumptions — presented as illustrative ceilings to reason from, not a revenue forecast.

Unfair Advantage: Built-In Field Access

Hydaspes Group separately operates a Validation-as-a-Service data and media licensing business, giving third-party defence-tech and dual-use partners access to the same expedition pipeline for their own field validation — example day-rates run £100–£1,200 for telemetry and data, and £1,000–£15,000 per minute for validated media capture. This is a separate commercial line from the Swordstone/Knowstone subscription pricing above.

Consolidated SaaS ARR Milestones

Year 1 in every domain is a fixed, curated cohort of 250 design partners. From Year 2, each domain resumes the stated market curve (1% → 5% → 15% → 30% of beachhead, floored at 250 users) at list price — £30/user/month for Defence and Civilian guide/SAR, £20/user/month for Industry and Fire Service. No CAC, churn, opex or hardware unit economics are assumed here; this is a software-only ARR model.

Metric	Year 1	Year 2	Year 3	Year 4	Year 5
Defence users (Pro)	250	700	3,500	10,500	21,000
Defence ARR	£90,000	£252,000	£1,260,000	£3,780,000	£7,560,000
Industry users (Pro)	250	5,300	26,500	79,500	159,000
Industry ARR (£20/user/mo)	£60,000	£1,272,000	£6,360,000	£19,080,000	£38,160,000
Fire Service users (Pro)	250	250	250	709	1,419
Fire Service ARR (£20/user/mo)	£60,000	£60,000	£60,000	£170,160	£340,560
Civilian users (Pro, guides & SAR)	250	250	350	1,050	2,100
Civilian ARR (£30/user/mo)	£90,000	£90,000	£126,000	£378,000	£756,000
Consolidated ARR	**£300,000**	**£1,674,000**	**£7,806,000**	**£23,408,160**	**£46,816,560**

08 — The Ask

£1.5M pre-seed.

£1.5M secures 18–24 months of runway to reach £1M+ ARR — the catalyst that transitions Hydaspes Group from a validated architectural MVP to a deployed, revenue-generating defence software prime, directly teeing up a Series A or non-dilutive defence scaling grants (DIANA/DASA).

50%

Engineering & Infrastructure

Hiring the core technical team (CTO, Senior Backend/Data Engineers) · securing defence-grade data residency and IL4/Official-Sensitive compliance · finalising ATAK integration and live predictive modelling.

25%

Go-To-Market & Deployment

Converting five organisations currently in active procurement discussion, and 250 initial defence/industry design partners, to the £30/user/month Pro tier · funding the travel, field-testing, and direct sales required for the “Trojan Horse” land-and-expand strategy.

15%

Phase 2 Hardware R&D

Finalising COTS integration (Garmin, inReach) · accelerating prototyping and patent filings for the proprietary Tactical Data Node and Biometric Patch to lock in the Phase 2 data moat.

10%

Operations & Legal

Corporate structuring, compliance mapping, IP protection, and working capital.

Cap Table

Hydaspes Group Ltd is currently 100% founder-owned by Dan Lansley, with no prior institutional investors, SAFEs, or convertible notes on the cap table. Instrument type and valuation for this round are to be agreed with the lead investor. An options pool will be carved out as part of the round to fund equity compensation for the CTO and senior engineering hires this raise is intended to make.

Five organisations in active procurement discussion, alongside the 250-design-partner cohort modelled in Market & Model above, represent current go-to-market pipeline — not signed contracts or committed revenue.

09 — Story

Named for what shouldn't be possible.

Swordstone OS is developed by founder Dan Lansley. The product and its sister product Knowstone OS are named separately — and carry two different stories.

FOUNDER

With a career spanning over a decade in the UK Armed Forces, Dan rose from the lowest enlisted rank to Captain, with key experience in Afghanistan, the High North, and US Special Operations Command. In May 2026, while delivering a technical-validation expedition on Everest for a previous company, he found himself able to track his hardware in real time but had no equivalent visibility into his own team — the gap that became Swordstone. He now leverages his specialist experience, and a deep, trusted network of veteran operators, to build and resource Swordstone OS.

THE NAMES: SWORDSTONE & KNOWSTONE

Swordstone takes its name from the legend of the sword in the stone — Excalibur, drawn from solid rock by the one deemed worthy, a feat every witness believed impossible. Against fear and doubt at a time of peril, the legends of our past give us confidence to deliver the future. Europe exists now in such a time.

The industrial and recreational markets trade under a sibling name, Knowstone — both drawn from real stones in South West England, both the same trademark and the same underlying engines, priced and positioned for a very different buyer. Two physical and cultural touchstones for a dual-use solution to one common problem.

A Note on the Parent Company

Hydaspes Group Ltd, the entity that owns and resources Swordstone OS, carries its own separate name and history — drawn from the Battle of the Hydaspes (326 BC), Alexander the Great's furthest eastern victory. Hydaspes owns Swordstone. It isn't the same thing, and this document keeps the two distinct on purpose. Company registration details are in Contact, below, for verification.

10 — Get In Touch

Talk to us about the interoperability gap you're carrying.

If your operators work where the grid, the ambulance, and traditional safety nets do not reach, and your current operating picture doesn't tell you what state your people are actually in — we want to hear from you.

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Hydaspes Group Ltd — incorporated 26 June 2026, England & Wales. Verifiable at Companies House.