

OFFICIAL



Australian Government
Department of Industry,
Science and Resources

Industry Growth Program
AusIndustry



Commercialisation and Growth Report

Gap Drone Pty Ltd

Peter Batchelor | 26 November 2024

business.gov.au | call 13 28 46

Copyright

© Commonwealth of Australia 2024

Ownership of intellectual property rights

Unless otherwise noted, copyright (and any other intellectual property rights, if any) in this publication is owned by the Commonwealth of Australia.

Disclaimer

Industry Growth Program (IGP) Advisory Services are undertaken by Advisers contracted by the Commonwealth. The Adviser's role is to identify areas, priorities and opportunities for commercialisation and growth which your business may choose to address, using the information you have supplied.

Eligibility for IGP Advisory Services does not mean that you are eligible for an IGP grant opportunity. Eligibility for an IGP grant opportunity is determined by the grant opportunity guidelines for the IGP. Any application for an IGP grant opportunity will also be subject to assessment by the IGP's independent Committee. Should you choose to apply for an IGP grant opportunity, this Report once finalised must be included as part of any grant application.

This service relies upon information you provide and may include the views of other parties in providing this service. As such, the Commonwealth, and any Advisers contracted by the Commonwealth, is unable to guarantee the accuracy, completeness, and relevance of services for your purposes. Any advice provided (including but not limited to options, referrals, introductions, or recommendations) as part of this service is general business advice and will not constitute financial, legal, taxation, accounting or insolvency advice and should not be relied upon as such. Before making any decision, it is important for you to consider these matters and where appropriate, seek independent advice and satisfy yourself that it is appropriate for your specific circumstances and business needs.

The views and opinions expressed in this report are those of the authors and do not necessarily reflect those of the Australian Government or the Department of Industry, Science and Resources.

The Commonwealth excludes all liability to the maximum extent permitted by law for any loss, damage, cost, or expense suffered or incurred arising from the use of, or reliance upon, the service or any actions taken by your business in addressing issues or implementing recommendations identified as part of the service, complementary services or otherwise provided separately by the Adviser, including you engaging with any third parties that may be referenced in your Report.

Version control and updates

Date	By	Summary	Version
13/11/2024	Peter Batchelor (IGP) Liesl Haris (Gap Drone)	IGP Commercialisation & Growth Report	Version 1
26/11/2024	Paul Mason	Peer Review	Version 2

IGP Client code: IGPAS002275

Contents

Contents.....	2
Report Summary	3
Discovery	5
Introduction and findings	5
SWOT summary.....	12
Business Model Canvas / Lean Canvas	14
Challenges and risks.....	21
Other considerations	23
Growth financials and metrics.....	27
Technology Readiness Level.....	29
Supporting information	30

Report Summary

Who?

- Gap Drone Pty Ltd is a female-led Australian private company designing and engineering remotely piloted aircraft for civilian and military applications.
- With a decade of expertise in heavy payload operations, Gap Drone has assembled a world-class team to make autonomous cargo airfreight a commercial reality.
- Gap Drone is collaborating with leading logistics companies such as Australia Post as well as academic and industry partners, including Swinburne University's AIR Hub and Nova Systems.

Where?

- Gap Drone will address the middle-mile logistics gap in remote, regional, and rural Australia, positioning itself as a pioneer in efficient, scalable airfreight solutions.
- Gap Drone's operational focus is currently directed toward serving remote regions in Northern Australia, where ground-based logistics challenges are most pronounced, resulting in limited access to essential goods and services.
- Key target markets include the Northern Territory, northeastern Western Australia, and western Queensland; areas ideally suited to Gap Drone's unique long-distance capabilities.
- Additionally, airframe assembly and manufacturing operations are based in Victoria, with R&D conducted in partnership with Swinburne University's AIR Hub.

Why?

- Remote Australian communities endure high logistics costs, frequent delays, and limited access to essential goods due to the inefficiencies of ground-based haulage over vast distances, insufficient infrastructure, and the economic barriers associated with servicing low population density areas.
- Gap Drone's airfreight solution addresses these challenges by offering a cost-effective alternative that enables equitable access to goods and services for remote and especially First Nations communities.
- By enhancing logistics coordination and reducing carbon impact, Gap Drone aims to provide a sustainable, tailored approach to meet the unique environmental demands of outback Australia. APG alone generates \$2.6b revenue annually in express, specialist and security logistics services. Gap Drone is positioned to capture a share of this growing market through unmanned aircraft system (UAS) servicing of remote regions.

How?

- The successful execution of this project will involve designing and developing a full-scale UAS prototype through a structured program of phased development, iterative testing, and validation; the establishment of Civil Aviation Safety Authority (CASA) -approved Beyond visual line-of-sight (BVLOS) routes to initiate flight testing; and the deployment of supporting infrastructure, such as Remote Community Connector Hubs.
- Gap Drone directly supports NRF priority areas such as Transport, Enabling Capabilities and Renewables and Low Emissions Technologies.
- Revenue will be generated primarily through long-term service contracts for middle and last-mile logistics, utilising a fixed-price wet-lease ACMI (Aircraft, Crew, Maintenance and Insurance) model based on an operational hourly rate with minimum annual usage requirements. Additional streams include direct sales to government and defence agencies as fleet capacity expands, training and support services, and technology partnerships for licensing advanced fleet management software to support operations across sectors.

OFFICIAL

What?

- Gap Drone will enable efficient, cost-effective logistics in remote Australia through the collaborative development of an advanced UAS/cargo drone (ATLAS UAV) within the medium RPA size category ($\leq 150\text{kg}$ MTOW), with an 800km range (1200km with reduced payload), 50kg payload capacity, and designed for reliable operation in the harsh environments typical of Outback Australia. This will be amongst the world's first high volume, low weight composite airframes, representing a significant advancement in UAS airframe technology.
- With drone deployment commencing late 2025, Gap Drone forecasts annual turnover to reach \$14.26m by 2027, growing to \$36.48m by 2030, driven by a fleet of 50 drones servicing critical logistics routes across Northern Australia. This 36% YOY growth trajectory will support the creation of more than 60 jobs through manufacturing, assembly, and execution of drone operations, including opportunities for First Nations Australians. Over 21% of revenue generated by 2027 will be reinvested into R&D, driving continued innovation to meet evolving market demands.

Discovery

Where to start and why?

Discovery is an ongoing process. We work together to consider where you and your company are now, and where you want (or need) to be in the future. We look at your aspirations, ambition and your opportunities, as well as understanding your challenges and risks. We examine the potential of your innovative product, process and /or service and how this can enable your business to significantly grow, scale up and transform. And we also examine your capacity, capability, and resources necessary to deliver this growth and transformation.

This process of discovery reveals the actions captured in this Commercialisation and Growth Project(s) and Report.

Implementing project outcomes

Commercialisation can be high-risk activities for businesses. The success of any commercialisation project depends on the ability of the business to implement the project outcomes, so businesses should plan for implementation of the outcomes as the project progresses. There is always the potential for timeframes to slip and budgets to increase.

Managing the intellectual property outcomes of collaborations can be critical for participating businesses. IP Australia provides information tailored to assist small-medium sized businesses at <https://www.ipaustralia.gov.au/sme-portal>. In addition, the business may benefit from the services of an IP specialist.

Introduction and findings

Where is the business today, and what is the ambition for the future?

What are the most important findings regarding opportunities for commercialisation and significant business growth?

Business context

History

- Founded on 8 February 2023 by directors Liesl Haris and Benet Hare, Gap Drone was established with a mission to bridge logistical and connectivity gaps using advanced Unmanned Aerial System UAS (drone) technology, focusing on customisable, carbon-reducing solutions.
- The business is privately held by the Directors, with \$1.5m in seed capital raised via SAFE issued to help progress the technology (\$450k Swinburne Ventures, \$1.05m Davencare Family Office).
- Currently has 2 full time employees and 4 primary contractors.
- Gap Drone has secured a strategic partnership with Australia Post, the country's largest logistics provider, which is looking to implement Gap Drone's customisable UAS solutions to meet their specific market demands. The company is also working closely with relevant regulatory bodies to ensure its aerial vehicles are fully aligned with Australian aviation requirements.

Market Problem

- Remote Australian regions face high logistics costs, delays, and limited access to essential goods due to sparse infrastructure, the inefficiencies of ground-based haulage over vast distances, and the economic disadvantages associated with delivering to low-population density areas. With no effective

Commercialisation and Growth Report Gap Drone Pty Ltd

OFFICIAL

solutions currently available to mitigate these barriers, Australians in remote, rural, and First Nations communities continue to incur high costs and experience inequitable access to essential goods and services.

Proposed Solution

- Gap Drone aims to enable efficient, cost-effective logistics in remote Australia through the collaborative design and development of an advanced UAS/cargo drone (ATLAS UAV) within the medium RPA size category - ≤150kg maximum take-off weight (MTOW).
- Key attributes of the Gap Drone solution:
 - Featuring an 800 km range (1200 km with reduced payload), 50 kg payload capacity, and the ability to take off and land on runways as short as 250 m, ATLAS is purpose-built for reliable operation in the harsh Outback environment.
 - Constructed with state-of-the-art carbon fibre composites and advanced manufacturing, this UAS is designed for ease of use, incorporating a modular design with removable wings to enable easy transport, rapid deployment, and simplified maintenance.
 - ATLAS offers up to an 80% reduction in carbon emissions compared to traditional ground-based freight transport by utilising synthetic fuel, with compatibility for existing engines and adaptability for future hydrogen propulsion.
- The UAS development process incorporates regulatory compliance measures from the outset to align with CASA requirements and avoid delays due to Type Certification.

Current Stage of Development

- Currently at TRL-4, Gap Drone is progressing toward the development of a full-scale UAS prototype, and the subsequent establishment of CASA-approved BVLOS routes with APG for commencement of flight testing.
- In conjunction with technology commercialisation, the team will also develop essential infrastructure, including Remote Community Connector Hubs, in readiness for the phased deployment of an initial fleet of 50 drones for full commercial operations.

Value Proposition

- Gap Drone's value proposition lies in offering an advanced UAS logistics solution specifically designed for efficient, cost-effective delivery to remote Australian regions, overcoming the high costs, delays and inefficiencies associated with traditional ground-based logistics over vast distances; as the only UAS in its class with the required range, payload, and durability for remote operations, it ensures scalable, commercially viable access to underserved communities. The design is collapsible to enable transport by shipping container, and with the ability to land on remote unsealed roads.
- Co-designed in collaboration with key industry stakeholders, this UAS reflects direct input from logistics leaders, ensuring it meets real-world demands and operational needs. To further align with customer requirements, flight testing will be conducted on specific, customer-requested routes, allowing for tailored performance assessments and route optimisation.
- Leveraging Australia Post's nationwide reach in conjunction with Gap Drone's innovative UAS technology, ensures comprehensive logistics coverage, eliminating distance as a barrier to timely access to essential goods and services.

Intellectual Property

- All IP relating to the UAS design, ground control systems and deployable communications systems is retained by Gap Drone, secured via commercial arrangements with all partner organisations.
- The team has a documented IP strategy for the registration of designs, trademarking of brand assets and patenting of several elements of the novel air frame (incl. wing, fuselage, and systems architecture and integration (upon completion)), entering the Australian national phase in 2025 before moving to PCT filings.

Commercialisation and Growth Report Gap Drone Pty Ltd

business.gov.au | call 13 28 46

OFFICIAL

- The existing portfolio includes the domain name (gapdrone.co) and registered trademarks for the Gap Drone name in Australia, India, and the Philippines.

Gap Drone Team

- Led by co-founders Liesl Haris (CEO) and Benet Hare (COO), the Gap Drone team includes:
 - Corporate Advisor, Tony Matthews (former CASA Chairman).
 - Senior Project Manager, Justin McKeown, Nova Systems.
 - Chief Remote Pilot, Dr. Matthew Marino (Associate Professor, RMIT University).
 - A team of 8 from Swinburne University's AIR Hub, consisting of a project manager and seven engineers (led by Director of Engineering, Dr. Adrian Di Pietro, founding Director of AIR Hub).
 - A business operations and advisory team consisting of CSM Advisors, LegalVision, an investment director, investment advisory from Sprout Scientific, R&D financing from Advanced, and regional directors based in the Philippines and South Africa.
- Board includes:
 - Liesl Haris (8 years in the aviation industry; former COO of Amber Aviation Group and Director of Business Operations at Dronamics);
 - Benet Hare (20 years in the aviation industry, including roles as Pilot, UAV proof-of-concept operations and delivery; former Captain and Training Captain at Cathay Dragon and Director of Flight Operations at Dronamics); and
 - Tony Matthews (former chairman of the board CASA 2018-2021).

Ambition and preparedness to undertake commercialisation and growth opportunities / project(s)

Ambition

- Gap Drone has clear ambition to address the challenges associated with traditional logistics for remote and rural service delivery with innovative solutions, and by doing so, establish itself as a world leader in remote logistics solutions. T
- This will be achieved through the execution of focused commercialisation and growth projects centred around: developing a full-scale prototype and establishing CASA approved BVLOS routes for real world flight testing; the deployment of the associated supporting infrastructure in the form of Remote Community Connector Hubs; and the phased rollout of an initial fleet of 50 drones for commercial operations.

Achievements to date:

- Secured \$1.7 million AUD in prototype funding from Australia Post (completed January 2024); officially launched project (February 2024); completed Systems Architecture and Specification Review (SASR) in June 2024; and completion of Preliminary Design Review (October 2024).
- Established strategic partnerships with premier logistics and research organisations, including Australia Post, Nova Systems, the AAM CRC and Swinburne University's AIR Hub, to advance technical development and optimise market alignment.
- Since its establishment, Gap Drone has allocated over \$1.2 million towards research and development (R&D) activities. Over the next 12 months, an additional \$1 million is projected for further R&D, partially offset by the Research and Development Tax Incentive (RDTI), which will support ongoing operational costs.

OFFICIAL

- Generated significant and written interest and support from major logistics providers both nationally and internationally, including Australia Post (also a financial contributor), Team Global Express (formerly TOLL), DHL Global, 2Go (Philippines), and Bluedart (India).

Next Steps & Roadmap:

- Complete the Detailed Design Review (expected December 2024) including subsystem critical design reviews, with prototype completion targeted for May/June 2025.
- Begin flight testing with RMIT and Nova Systems from November 2024 through December 2025, initially focusing on subscale integration of C2 systems and autopilot, progressing to full-scale testing in June 2025.
- Finalise a full-scale prototype for testing on a CASA-approved lane and establish a robust user pipeline across public (B2G) and private (B2B) sectors.
- Initial commercial operations are set to launch across the Northern Territory, Western Australia, and Queensland in December 2025, followed by a phased deployment plan: deploying one drone from 1 December 2025, adding one drone per month from January 2026, and scaling up to two drones per month from February 2028 to reach an initial fleet of 50 drones by January 2029.
- International expansion is planned over the medium to long term, targeting south-east Asian countries with underdeveloped and challenging last mile logistics, and North America.

Commercialisation and growth considerations

Target market/s

- Gap Drone's primary target market includes logistics and delivery providers, such as APG (Australia Post Group), and the Defence Force Australia.
- Key beneficiaries include remote and rural communities, First Nations communities, and relevant federal government bodies, including the Department of Transport, National Indigenous Australians Agency, and Australian Defence Force.
- Early adopters, including logistics and delivery providers like APG, can benefit immediately from enhanced connectivity to underserved regions.
- On an International level, Gap Drone has received interest from large international and foreign-based logistics providers, including DHL Global, 2Go (Philippines) and Bluedart (India), and will be targeting geographical regions with both underdeveloped logistics and supply lines, (incl. the Philippines, India, and the Middle East), as well as regions with developed logistics capabilities, including North America.

Market Opportunity

- Gap Drone's market opportunity is defined by a Total Addressable Market (TAM) of \$4.3 trillion in global logistics, with a Serviceable Available Market (SAM) of \$1.3 trillion, primarily focusing on regions that have limited logistics infrastructure. The Serviceable Obtainable Market (SOM) is projected at \$130 billion, representing the revenue potential for Gap Drone.

Path to Market/Use of Channel

- Gap Drone's path to market leverages a multi-channel approach designed to build traction with early adopters and scale to broader markets.
- Initial efforts will capitalise on pilot programs and co-design initiatives with key logistics providers, including Australia Post, to ensure early validation and market fit.
- Through actively engaging at industry events, Gap Drone aims to establish strong brand credibility and foster strategic alliances that will drive future growth.
- Collaborations with technology firms and research organisations including Swinburne's AIR Hub, the AAM CRC and Nova systems will support licensing and co-development of advanced drone

Commercialisation and Growth Report Gap Drone Pty Ltd

business.gov.au | call 13 28 46

8

OFFICIAL

OFFICIAL

technologies, including fleet management software, to create additional revenue channels in broader markets and reinforce brand credibility.

- The company will phase its scale-up strategy, transitioning from pilot programs to full commercial deployment through a fixed-price wet-lease model (ACMI) at \$380 per operational hour with minimum annual usage commitments to ensure consistent revenue. As operations expand and fleet capacity grows, direct sales are projected at approximately \$400,000 per unit, targeting government and defence sectors.
- Taking a phased approach allows for diversified revenue streams from service contracts, direct sales, training, support services, and technology licensing, ensuring scalable, sustainable growth across sectors.

Competitive Landscape

- The competitive landscape for autonomous/remotely piloted delivery drones in remote logistics remains sparse, particularly in the middle-mile niche that Gap Drone targets. While companies like Swoop Aero focus on short-range operations and Dronamics on heavy, long-range flights, Gap Drone is strategically positioned to bridge this middle-mile gap, with the key advantage of not requiring type certification for its weight class, enabling deployment on completion.
- Currently, traditional ground-based logistics remains the primary alternative, though it is costly and inefficient in rural and remote areas, highlighting Gap Drone's unique positioning in providing scalable, autonomous airfreight solutions where few competitors exist.

Sustainable Competitive Advantage

- Gap Drones sustainable competitive advantage can be highlighted by its first mover status for a solution necessitating long developmental timelines, creating an inherent barrier to imitation.
- Supported by exclusive partnerships with industry (incl. APG), Gap Drone also benefits from access to shared resources in the form of specialised infrastructure, regulatory support, and industry expertise.
- With a fully funded flight test program and a supportive regulatory environment, Gap Drone is well-positioned to maintain low overheads and solidify its early lead in the market.

Manufacturing Strategy

- Gap Drone will leverage local manufacturing and assembly capabilities in Victoria (including wire harness manufacture, composite fabrication activities with established watercraft manufacturers and full unit assembly) that will shore up the supply chain and generate local jobs, supported by state-of-the-art imported power plant and avionics systems from Germany and Spain, respectively.

Capital Considerations

- Funds to date – Raised \$3 million, comprising \$1.5 million from investors through SAFE agreements and \$1.5 million in grants.
- Achievement of MVP prototypes will drive further capital investment from existing investors and industry partners.
- According to company projections and financial models, a further \$20 million in capital will be invested between 2026-2029 to develop inventory, communication infrastructure and rollout operations.
- Securing grant funds will accelerate the timeline to MVP and allow Gap Drone to capture and consolidate on the market opportunity.

Key risks

- Currently pre-revenue and reliant on external funding, Gap Drone faces pressure to sustain growth initiatives, achieve timely R&D outcomes, and rapidly develop a scalable MVP to capitalise on time-

OFFICIAL

sensitive market opportunities; delays or increased capital requirements in UAS development and testing could strain financial resources.

- The business model heavily depends on formalised relationships with third parties; failure to secure or maintain these key contracts could significantly disrupt revenue streams if suitable alternatives are not established.
- The Company's operations in highly regulated markets, including defence and trade with government bodies, expose it to potential regulatory and legal risks. Changes in laws or regulations in Australia or in international markets could materially impact business operations and the ability to execute growth strategies effectively.
- Reliance on technology for UAS development and core operations poses risks of system failures, data breaches, and cyberattacks. Any disruptions could delay prototype development, impact customer communication, and affect revenue, despite security measures in place.

Valuable Networks and Possible Introductions

- Gap Drone already has established strong industry and government linkages including:
 - Regulatory body: *Civil Aviation Safety Authority (CASA)*
 - Customers and potential customers: Australia Post, DHL Global, Bluedart (India and 2Go (Philippines))
 - Research and Innovation Networks: Swinburne University Aerostructures Innovation Research (AIR) Hub, RMIT University, the Cooperative Research Centre (CRC) for Developing Northern Australia and the iMove CRC.
 - Capital providers: Australia Post, Swinburne Ventures and the Davencare Family Office
- Other useful networks and possible introductions that could support Gap Drone's growth and expansion include:
 - *Australian Government Departments and Officials including:*
 - Department of Infrastructure, Transport, Regional Development and Communications
 - Office of Northern Australia
 - Indigenous Business Australia
 - Regional Development Australia
 - *Australian Organisations:*
 - Australian Logistics Council
 - Freight & Trade Alliance
 - Regional Airlines Association of Australia
 - *International Organisations:*
 - International Air Transport Association (IATA)
 - International Civil Aviation Organization (ICAO)
 - World Economic Forum's Drone Innovators Network
 - Commercial Drone Alliance
 - Association for Unmanned Vehicle Systems International (AUVSI)
 - Potential customers include:
 - DHL Global
 - FedEx

OFFICIAL

- UPS
- Amazon Prime Air
- Wing (Alphabet's drone delivery company)
- Research and Innovation Networks
 - Australian Research Council
 - CSIRO
 - Defence Science and Technology Group
 - Aerospace Australia Limited

SWOT summary

What are the primary business strengths, weaknesses, opportunities, and threats?

Strengths	Weaknesses
<ul style="list-style-type: none"> - Strong collaborative partnerships with key industry & academic leaders (incl. Aus Post, Swinburne University and AAM CRC) provide a foundation of expertise, resources & support. - Extensive internal expertise, experience and track record in the aviation industry provides insight into industry specific challenges. - The solution addresses an untapped gap in the market/unresolved market challenge of efficient remote freight transportation with advanced UAS technology. - Aligned with Australian government initiatives to connect rural Australia and support equitable access of essential logistics services for rural, remote, and Indigenous communities (Closing the Gap, National Strategy for Food Security in Remote First Nations Communities, et al.). - Robust R&D framework ensures well-tested, resilient products tailored to the unique demands of regional Australia. - Established evidence of market demand demonstrated through a strong, collaborative relationship with priority customer Australia Post. - Strong combination of local & international interest from multiple high-value customers, including TGE (formerly Toll) and Blue Dart, reducing reliance on a single customer and strengthening market resilience. - Comprehensive go to market plan, in conjunction with high-potential revenue model supports scalability & profitability. - Existing investor base & capital contributions (exceeding \$2M to date), demonstrating strong financial support of team, technology, and go-to-market plan. - Established strategic relationships with supply chain technology providers, and support from local manufacturing/assembly capabilities. 	<ul style="list-style-type: none"> - Currently pre-revenue, relying primarily on external funding to sustain growth initiatives. - Reliance on successful R&D & product development outcomes, which may influence timelines. - The capital-intensive nature of UAS development & testing could pressure the business's financial resources, particularly in the event of delayed funding. - Current market opportunities presenting are time sensitive and require rapid development of a scalable MVP. - Avionics and powerplant subsystems are reliant on overseas supply chains (Germany and Spain).
Opportunities	Threats
<ul style="list-style-type: none"> - Written intent from Australia Post for a phased introduction of 50 wet-leased units over 5 years (2026-2030). - Opportunity to be first-to-market in providing autonomous logistics solutions in the medium RPA (Remotely Piloted Aircraft) weight category, tailored to the environmental challenges of rural/remote Australia. - Proposed UAS technology can be modified to address other use cases/market opportunities (rural healthcare, emergency response etc.) - Longer and capital-intensive aerospace R&D process presents a barrier to imitation and extends first-mover opportunity. - Pathway for future export potential, positioning Australia as a leader in UAS logistics for remote areas and driving long-term economic growth. - Gap Drone has the opportunity to be an industry-leader in cargo/delivery drones for rural use, positioning it at the forefront of an emerging sector. 	<ul style="list-style-type: none"> - Project completion is contingent on continued securement of external funding, as successful execution of the solution relies on sustained financial support. - Potential variability in project timelines due to the unpredictable nature of R&D and number of collaborating partners, which may impact overall scheduling and milestones. - Risk associated with delayed market entry, which could limit the ability to capitalise on existing and emerging opportunities before competitors develop competing solutions.

OFFICIAL

- | | |
|--|--|
| <ul style="list-style-type: none">- Gap Drone can leverage alignment with Australian government goals to secure grants, subsidies, regulatory support, and potential government procurement opportunities, accelerating deployment and adoption. | |
|--|--|

Business Model Canvas / Lean Canvas

<p>Problem 2</p> <p>What are the top 1-3 problems for the early adopter specifically?</p> <p>Why are they problems? Is there a deeper root cause?</p> <ul style="list-style-type: none"> • High costs, inefficiencies and delays associated with traditional methods for logistics (haulage) in low-density, remote regions. • Lack of equality in supply of essential goods to remote communities • Limited digital infrastructure and connectivity in remote areas, restricting efficient logistics coordination. • Lack of physical infrastructure and high costs of facility development in remote regions. <p>Existing Alternatives</p> <p>How do they solve the problem today?</p> <p>Currently, there are no comparable solutions to autonomous delivery drones for remote logistics; traditional ground-based logistics methods are the primary alternative, though they remain costly and inefficient in low-density, remote areas.</p>	<p>Solution 4</p> <p>How will we deliver value to your target early adopters. Define the "Minimum Viable Product" (MVP).</p> <ul style="list-style-type: none"> • MVP- An innovative UAS/cargo drone within the medium RPA size category with autonomous flight control capabilities that can meet specified operational requirements while being robust enough to endure harsh environmental conditions typical or rural Australia. Range: 800 km at full payload, capacity (50 kg) and up to 1200 km with reduced payload. <p>Key Metrics 8</p> <p>What are the key numbers which tell us how our business is doing:</p> <p>What customer action drives value (e.g. user posts a tweet)</p> <p>How will we define success?</p> <ul style="list-style-type: none"> • Revenue and Profitability Metrics (EBITDA etc.) • Units in-field • Customer Satisfaction and Retention • Maintenance and Reliability Metrics (incl. scheduled departure/arrival times, unit down-time) 	<p>Unique Value Proposition (UVP) 3</p> <p>How will we get the customers attention? What value do we deliver to the customer?</p> <ul style="list-style-type: none"> • Expanded reach and reduced costs for remote deliveries: Provides a reliable way to reach remote locations, drastically reducing the high costs and inefficiencies of ground-based logistics in low-density areas. • The only UAS in its class capable of meeting operational needs for rural Australia: Designed to achieve the range, payload, and durability required for effective, scalable deliveries in remote areas while remaining within CASA's medium RPA MGTOW category (under 150kg), for immediate commercial applicability. Predominantly Australian-made/assembled. • Co-designed with beta customers and flight tested on predetermined, customer requested flight paths: Modular design for container transport (removable wings). <p>High – Level Concept</p> <p><small>A simple way to explain your business idea (high concept pitch)</small></p> <p>Developing an autonomous UAS/cargo drone in the medium RPA size category (under 150kg) designed to carry payloads over vast distances (up to 1000 km) and operate reliably in rural Australian conditions, offering advanced solutions to connect remote areas with essential goods and services.</p>	<p>Unfair Advantage 9</p> <p>What is our sustainable unfair advantage in this market?</p> <ul style="list-style-type: none"> • Exclusive Partnerships: Collaborations with e.g. APG and Swinburne provide unique access to industry expertise, infrastructure, and regulatory support. • Purpose-Built & innovative Design: Specialised & cutting-edge UAS technology, designed for harsh Australian conditions, offers capabilities that are difficult for competitors to replicate. • First Mover Advantage - long development timeline creates barrier to imitation <p>Channels 5</p> <p>How will we build a path to our customers?</p> <p>How will we reach early adopters vs later customers?</p> <ul style="list-style-type: none"> • Pilot Programs with beta customers using MVP units • Direct Engagement and co-design with Key Stakeholders, including AusPost and peak bodies • Industry Events and Conferences • Leveraging development partner connections (Swinburne AIRHub, AAM CRC) 	<p>Customer Segments 1</p> <p>For whom are we creating value? Who are our most important customers? Be specific, focussed and include any assumptions.</p> <p>Primary Customer Segment/Target Market</p> <ul style="list-style-type: none"> • Logistics and Delivery Providers (e.g., APG - Australia Post Group) • Defence Force Australia <p>Key Stakeholders/Beneficiaries</p> <ul style="list-style-type: none"> • Remote and Rural Communities • First Nations communities • Federal Government (e.g., Department of Transport, Indigenous Affairs, Defence) <p>Early Adopters</p> <p>Who will you target first?</p> <ul style="list-style-type: none"> • Logistics and Delivery Providers (e.g., APG - Australia Post Group) 	
<p>Cost Structure 7</p> <p>A Simple assessment of the potential costs. What are the most important costs in our business model? Which Key Resources and / or Key Activities are most expensive?</p> <table border="0"> <tr> <td style="vertical-align: top;"> <ul style="list-style-type: none"> • Most Important Costs: -Develop & test MVP prototype -Tooling, manufacturing and assembly costs. Importation of avionics and power plant units. Fuel Costs -Pilot and Handler Costs, technician costs (COGS) </td> <td style="vertical-align: top;"> <ul style="list-style-type: none"> • Key Resources/Activities: -Scheduled Maintenance and Servicing -Landing and Infrastructure Costs -Depreciation </td> </tr> </table>		<ul style="list-style-type: none"> • Most Important Costs: -Develop & test MVP prototype -Tooling, manufacturing and assembly costs. Importation of avionics and power plant units. Fuel Costs -Pilot and Handler Costs, technician costs (COGS) 	<ul style="list-style-type: none"> • Key Resources/Activities: -Scheduled Maintenance and Servicing -Landing and Infrastructure Costs -Depreciation 	<p>Revenue Streams (Pricing) 6</p> <p>Pick a price aimed at your early adopters. For what value are they really willing to pay? For what do they currently pay? How are they paying and how would they prefer to pay?</p> <ul style="list-style-type: none"> • Leasing Model (Fixed-Price, ACMI): UAS units will be leased under a fixed-price wet-lease model at \$380 per operational hour, with a minimum operational time of 6 flight hours per day per drone. • Product Sales: Following initial operational expansion, direct sales are projected at around \$400,000 per unit, targeting industries such as government and defence. • Training, Support, and Consulting: Comprehensive training, support, and consulting services add revenue while enhancing client satisfaction and solution integration. • Partnerships and Licensing: Partnerships for co-developing and licensing drone tech and fleet management software open broader markets and revenue channels. 	
<ul style="list-style-type: none"> • Most Important Costs: -Develop & test MVP prototype -Tooling, manufacturing and assembly costs. Importation of avionics and power plant units. Fuel Costs -Pilot and Handler Costs, technician costs (COGS) 	<ul style="list-style-type: none"> • Key Resources/Activities: -Scheduled Maintenance and Servicing -Landing and Infrastructure Costs -Depreciation 				

Suggest follow number order from 1 to 9. Use bullet points rather than sentences. Remember - there are no wrong ideas or answers.

Commercialisation and Growth Report Gap Drone Pty Ltd

business.gov.au | call 13 28 46

Commercialisation and Growth Priorities

Commercialisation and Growth Priority / Project 1- Development of Full-Scale UAS Prototype and Establishment of CASA-Approved BVLOS Routes with APG for Commencement of Flight Testing

The Opportunity	Why Focus on This?	SMART Goals
<p>The project presents a first-mover opportunity to connect Australia’s regional, rural and remote communities while enhancing uncrewed systems and Advanced Air Mobility capabilities within Australia, through the development of a full-scale UAS prototype MVP for long-range autonomous operation, and establishment of CASA-approved BVLOS routes for subsequent flight testing/validation, addressing critical logistics needs in remote areas.</p>	<p>The full-scale development of the UAS prototype, along with the formal establishment of CASA-approved BVLOS flight routes for real-world testing, is a critical step toward realising advanced solutions to connect rural and regional Australia by addressing the unique challenges of remote logistics (e.g. harsh environmental conditions, limited infrastructure etc.).</p> <p>This will empower logistics providers such as Australia Post and TLGE with the ability to reduce costs and improve equality in provision of essential goods to remote and First Nations communities</p>	<ul style="list-style-type: none"> • Within 12 months we aim to: • Complete the design and development of an innovative, full-scale UAS prototype that meets all required operational performance metrics (payload capacity, flight distance etc.). • Establish CASA-approved, commercially applicable BVLOS flight routes to conduct real-world testing and validation of the full-scale UAS prototype, demonstrating reliable performance across key metrics such as autonomous navigation and environmental resilience within operational environments.
Technology Readiness Level:	Current TRL: 4	Future TRL (and when): 7 (within 12 months)
Estimated budget and resources:	Budget / investment: \$2.835M for F25 & F26	Resources (FTE): 2 (internal), 4 (external)
Recommendations - Actions / Tasks for this Priority / Project		
<p>Action – Formulate the basis of the System Architecture & Specification to establish the objective requirements/metrics that will define the aircraft regarding its performance/function, including the technical performance measures (range, MTOW etc.); conduct System Architecture & Specification Review (SASR) to assess the conceptual vehicle architecture against the specified requirements.</p>		
<p>Action – Design major structural elements using CAD software and conduct digital simulations to assess vehicle stability and performance under various conditions, with iterative refinements to meet operational requirements.</p>		
<p>Action – Define interfaces between subsystems, including mechanical, electrical, data, and user interfaces, and integrate subsystems within an Ironbird testbed to assess compatibility and functionality.</p>		
<p>Action – Conduct Preliminary Design Review, to assess the system design & any completed subsystem testing against the system requirements.</p>		
<p>Action – Conduct load & stress analysis; evaluate & select appropriate structure joining methods, ensuring structural integrity; conduct Detailed Design Review (DDR) to finalise system design of product baseline, ready for manufacture/fabrication of components.</p>		
<p>Action – Fabricate and assemble the full-scale prototype, ensuring all subsystems and interfaces meet operational specifications, and conduct a first article inspection.</p>		
<p>Action – Establish CASA-approved BVLOS routes in collaboration with Aviation Policy Group (APG) to enable safe and compliant real-world testing of the UAS prototype in operational environments.</p>		
<p>Action – Execute flight tests to validate the prototype’s performance metrics, such as autonomous navigation and environmental resilience, under real-world conditions.</p>		
<p>Action – Refine the prototype based on real-world flight test results and stakeholder feedback, optimising it for scalable manufacturing processes in preparation for broader deployment.</p>		

OFFICIAL

<p>Comment on progress to date:</p> <ul style="list-style-type: none">• Officially launched the project in February 2024, marking the start of formal development efforts.• Completed the Systems Architecture and Specification Review (SASR) in June 2024, finalising technical requirements and design principles.• Achieved Preliminary Design Review (PDR) milestone in October 2024, validating initial design and ensuring alignment with project goals.	<p><input type="checkbox"/> Not started</p> <p><input checked="" type="checkbox"/> In progress</p> <p><input type="checkbox"/> Complete</p>
---	---

Commercialisation and Growth Priority / Project 2 – Develop Associated Infrastructure, Including Remote Community Connector Hubs/Digitised Connectivity Hubs

<p>The Opportunity</p> <p>The project presents an opportunity to develop the digital infrastructure required for the reliable operation of autonomous UAS/delivery drones in remote areas, through the development & deployment of remote community connector hubs/digitised connectivity hubs. These hubs will function as self-sufficient beacons with LTE/satellite connectivity to drones, enabling real-time updates to ground control, while simultaneously providing landing facilities, thereby ensuring regulatory compliance, and enhancing operational safety.</p>	<p>Why Focus on This?</p> <p>This project addresses the need for sustainable, efficient logistics and enhanced drone connectivity in remote areas by developing & deploying the necessary digital infrastructure to support real-time monitoring and compliance, aligning with national goals for equitable access to goods & services and Advanced Air Mobility development.</p>	<p>SMART Goals</p> <p>Within 12-24 months we aim to:</p> <ul style="list-style-type: none"> • Develop & deploy the required digital infrastructure for autonomous UAS operation, including self-sufficient connectivity hubs to enable real-time updates of relevant metrics (weather etc.), facilitating compliance and safety for remote logistics operations.
<p>Technology Readiness Level:</p>	<p>Current TRL: NA</p>	<p>Future TRL (and when): NA, 12 months</p>
<p>Estimated budget and resources:</p>	<p>Budget / investment: \$500,000</p>	<p>Resources (FTE): 3 internal 4 external</p>
<p>Recommendations - Actions / Tasks for this Priority / Project</p>		
<p>Action – Conduct a site assessment and feasibility study to identify optimal locations in consultation with local communities and beta customer Australia Post, for the deployment of remote community connector hubs, considering connectivity needs, environmental conditions, and logistical support.</p>		
<p>Action – Design and develop self-sufficient remote community connector hubs/digitised connectivity hubs with solar power and LTE/satellite connectivity, which enable real-time data transmission for regulatory compliance, safety monitoring, and enhanced connectivity in remote regions.</p>		
<p>Action – Deploy initial connectivity hubs at pilot sites to validate functionality and ensure real-time updates for compliance and safety monitoring.</p>		
<p>Action – Implement a phased rollout of connectivity hubs, adjusting deployment plans based on ongoing feedback from stakeholders, data analysis, and regulatory developments.</p>		
<p>Action – Establish a maintenance and support protocol for deployed hubs to ensure continuous operation, including a schedule for routine inspections, data transmission checks, and solar power system maintenance.</p>		
<p>Comment on progress to date:</p>	<p><input checked="" type="checkbox"/> Not started <input type="checkbox"/> In progress <input type="checkbox"/> Complete</p>	

Commercialisation and Growth Priority / Project 3 – Build and Deploy a Fleet of 50 Autonomous Delivery Drones for Commercial Operation

The Opportunity Phased deployment of a fleet of 50 autonomous delivery drones for commercial operation enables Gap Drone to revolutionise remote logistics, providing efficient and scalable delivery solutions while capturing early market share and positioning itself as a leader in autonomous delivery.	Why Focus on This? This project addresses the demand for efficient logistics in remote areas, and serves as a critical step in realising sustainable, scalable delivery solutions in underserved regions.	SMART Goals Within 18-24 months we aim to: Have approx. 15 total Drones in commercial operation (on roadmap to 50 total Drones by 2029).
Technology Readiness Level:	Current TRL: 7 (after C&G priority 1)	Future TRL (and when): 9 (within 18-24 months)
Estimated budget and resources:	Budget / investment: forecast est. \$16,000,000	Resources (FTE): 8 Internal 10 External
Recommendations - Actions / Tasks for this Priority / Project		
Action – Establish a phased deployment plan to scale the fleet, which includes producing 1 drone per month from 1/01/2026, increasing to 2 per month from 1/02/2028, to reach 50 drones in operation by 1/01/2029.		
Action – Set up a dedicated control and monitoring system for real-time coordination, performance tracking, and maintenance of the drone fleet.		
Action – Implement a data collection and analysis system to optimise fleet efficiency, enhance predictive maintenance, and monitor autonomous functionality.		
Action – Implement continuous evaluation and adjustments to the deployment plan, optimising production and operational efficiency based on performance data and feedback as the fleet scales.		
Comment on progress to date:		<input checked="" type="checkbox"/> Not started <input type="checkbox"/> In progress <input type="checkbox"/> Complete

Other Actions		
Description	Responsible	Status
Raise non-diluting capital via accessing relevant government grant(s). Commenced by applying for the IGP Advisory Services with a view of qualifying to be eligible to apply to the IGP Grant.	Client	<input type="checkbox"/> Not started <input checked="" type="checkbox"/> In progress <input type="checkbox"/> Complete
Consider timing for the expanding the Board and start eliciting interest from people with the requisite backgrounds to future fill Non-Executive Directors.	Client	<input checked="" type="checkbox"/> Not started <input type="checkbox"/> In progress <input type="checkbox"/> Complete
Continue to engage with Venture Capital community to generate interest for next funding round.	Client	<input type="checkbox"/> Not started <input checked="" type="checkbox"/> In progress <input type="checkbox"/> Complete
Engage with key opinion leaders (KOLs) to elicit non-bias positive feedback and to help position the solution within the sector and enter new markets.	Client	<input checked="" type="checkbox"/> Not started <input type="checkbox"/> In progress <input type="checkbox"/> Complete
Participant in relevant industry conferences and trade shows to promote the drone technology with key stakeholders and potential customers.	Client	<input type="checkbox"/> Not started <input checked="" type="checkbox"/> In progress <input type="checkbox"/> Complete
Leverage pilot studies and independent research to produce White Papers and Customer Case Studies articulating the economic and social benefits of deploying the drone solution.	Client	<input type="checkbox"/> Not started <input checked="" type="checkbox"/> In progress <input type="checkbox"/> Complete
Leverage the White Papers and Customer Case Studies to introduce value-based pricing to help facilitate an increase in pricing, improving profitability from product and service sales.	Client	<input checked="" type="checkbox"/> Not started <input type="checkbox"/> In progress <input type="checkbox"/> Complete

Financing opportunities

- Although likely to be deemed too early in its current growth phase, the business could in the future, consider National Reconstruction Fund (NRF) loans or other mechanisms to support project development. [The NRF investment guidance information](#) is available online, and submission proposals for investment are open [on this link](#).
- [Breakthrough Victoria](#) (BV) also has some support available for startups in many different sectors depending on the location of the main business operations.
- Seeking [corporate venture fund](#) support is an option already being explored by the business resulting in Australia Post investing in the business.
- The business could explore securing funding assistance from [Export Finance Australia](#) via loans to help manage cash flow shortages that may occur between export order fulfilment and customer payments.

OFFICIAL

Rates and terms offered maybe no better than a traditional bank though the security required maybe less onerous. The borrower may also need a trading history.

- The business should consider applying for Round 4 of the [Export Market Development Grants \(EMDG\)](#) opening in November 2024. There will be different opening dates for representative bodies and each tier.
- The business could possibly access lower cost human capital via the [APR Intern Program](#) or [Practera](#).
- [The Australian Economic Accelerator \(AEA\)](#) could potentially fund projects linked to one of the business' university partners.
- The business may also consider grant co-funding under the IGP ([Industry Growth Program](#)) to help scale the business

Note: The IGP Grant is a separate application process. It is *highly competitive with no guarantee of funding*.

Challenges and risks

What would need to be addressed to deliver commercialisation, growth and scaling up of the business?

Risk	Probability	Impact	Mitigation strategy
Insufficient funds / other resources	<input type="checkbox"/> High <input checked="" type="checkbox"/> Medium <input type="checkbox"/> Low	<input checked="" type="checkbox"/> High <input type="checkbox"/> Medium <input type="checkbox"/> Low	Comprehensive financial planning and resource management, including securing of external investment/re-investment, applying for relevant grants including RDTI program, leveraging partnerships for shared resources and leveraging established relationships with non-dilutive finance providers.
Product / process / service market fit	<input type="checkbox"/> High <input type="checkbox"/> Medium <input checked="" type="checkbox"/> Low	<input checked="" type="checkbox"/> High <input type="checkbox"/> Medium <input type="checkbox"/> Low	<p>Incorporating stakeholder feedback and co-design principles throughout all development phases, including the Concept of Operations, to ensure alignment with market needs.</p> <p>Partnerships with industry leaders in logistics and postal services (e.g., Auspost, TGE and Blue Dart.)</p> <p>Beta customer framework for prototype testing and seek ongoing input to continually refine the product and achieve optimal market fit.</p>
Product / process / service performance	<input type="checkbox"/> High <input type="checkbox"/> Medium <input checked="" type="checkbox"/> Low	<input checked="" type="checkbox"/> High <input type="checkbox"/> Medium <input type="checkbox"/> Low	Clearly identifying the objective performance metrics required for operation. Collaborative development and rigorous testing and validation with industry, community and academic partners. Continuous iterative adjustments to enhance every component of product design.
Market adoption	<input type="checkbox"/> High <input type="checkbox"/> Medium <input checked="" type="checkbox"/> Low	<input checked="" type="checkbox"/> High <input type="checkbox"/> Medium <input type="checkbox"/> Low	Leverage established partnerships with industry stakeholders (incl. AusPost) to demonstrate operational capabilities and value in real-world settings. Utilise focused marketing efforts and pilot programs to build awareness, validate the technology, and drive adoption in targeted remote and logistics markets.
Competition from existing providers	<input type="checkbox"/> High <input type="checkbox"/> Medium <input checked="" type="checkbox"/> Low	<input type="checkbox"/> High <input type="checkbox"/> Medium <input checked="" type="checkbox"/> Low	(No existing providers) - Significant investment in an Accelerated R&D program and securement of first sales to capture the market opportunity before additional market entrants establish.
Adaptability and innovation	<input type="checkbox"/> High <input type="checkbox"/> Medium <input checked="" type="checkbox"/> Low	<input type="checkbox"/> High <input checked="" type="checkbox"/> Medium <input type="checkbox"/> Low	R&D plan incorporates user-friendly, modular design that allows for easy repairs and maintenance in remote settings. Prioritise adaptability to meet diverse environmental conditions, and ongoing R&D investment plan to incorporate emerging technologies and address shifting market demands.

OFFICIAL

Risk	Probability	Impact	Mitigation strategy
Key partnerships	<input type="checkbox"/> High <input type="checkbox"/> Medium <input checked="" type="checkbox"/> Low	<input type="checkbox"/> High <input checked="" type="checkbox"/> Medium <input type="checkbox"/> Low	Strengthen relationships with already established industry & academic partners to ensure aligned goals and resource sharing. Continuously cultivate new and existing partnerships with industry partners, suppliers and channel partners to support long-term resilience.
Compromised confidentiality	<input type="checkbox"/> High <input type="checkbox"/> Medium <input checked="" type="checkbox"/> Low	<input checked="" type="checkbox"/> High <input type="checkbox"/> Medium <input type="checkbox"/> Low	Implement strict confidentiality agreements with partners and employees, reinforced by robust cybersecurity measures to protect sensitive data. Regularly review and update security protocols to safeguard intellectual property and proprietary information.
Skilled staff recruitment	<input type="checkbox"/> High <input type="checkbox"/> Medium <input checked="" type="checkbox"/> Low	<input type="checkbox"/> High <input checked="" type="checkbox"/> Medium <input type="checkbox"/> Low	Leverage network and build team culture/internal advocacy plan to attract and retain skilled personnel. Offer competitive packages for key roles. Develop ESOP to retain critical staff once first sales have been achieved.
Regulatory Compliance	<input type="checkbox"/> High <input checked="" type="checkbox"/> Medium <input type="checkbox"/> Low	<input type="checkbox"/> High <input checked="" type="checkbox"/> Medium <input type="checkbox"/> Low	Product designed to meet medium weight category and reduce compliance under CASA Part 21 regulations (medium RPA category MGTOW (under 150kg)). Engage proactively with regulatory bodies and conduct regular compliance checks to ensure adherence to standards. Leverage legal and compliance expertise to navigate evolving regulations.
Timeline Variability in Experimental Development	<input type="checkbox"/> High <input checked="" type="checkbox"/> Medium <input type="checkbox"/> Low	<input type="checkbox"/> High <input checked="" type="checkbox"/> Medium <input type="checkbox"/> Low	Implement phased development with built-in timeline contingencies and regular progress reviews, leveraging early prototyping, partnerships, and contingency resources (extra budget etc.) to manage potential delays in experimental UAV development.
Intellectual Property (IP) Protection	<input type="checkbox"/> High <input type="checkbox"/> Medium <input checked="" type="checkbox"/> Low	<input type="checkbox"/> High <input checked="" type="checkbox"/> Medium <input type="checkbox"/> Low	Implement strong IP protocols and secure patents for unique airframe and modularity features locally (Y1) before entering PCT (Y's 2-3) to safeguard innovations, and enforce confidentiality agreements with partners and staff to prevent unauthorised disclosures.

Other considerations

What else could or should be considered for success?

Other considerations	Applicability to the business / where are they on their journey – awareness, relevance, and importance (High, Medium, Low or not applicable) and include reason if not applicable	Relevance / importance to the business for growth and scaling up - what is the opportunity - why, how and when? Or reason if not applicable
Net Zero journey, decarbonisation	<input checked="" type="checkbox"/> High <input type="checkbox"/> Medium <input type="checkbox"/> Low <input type="checkbox"/> Not applicable – reason?	How/Why: Product has been designed for fuel flexibility (i.e. opportunity to utilise renewable green hydrogen economy by ca. 2030). Improved fuel economy for small payloads to remote locations compared with traditional haulage which is carbon intense. When: on-launch (YE 2025)
Sustainability, circular / closed loop economy (recycling / regeneration and reuse)	<input checked="" type="checkbox"/> High <input type="checkbox"/> Medium <input type="checkbox"/> Low <input type="checkbox"/> Not applicable – reason?	How/Why: Individual subsystem effective lifespans have been analysed and integrated into refurbishment and recycling/reuse protocols. E.g. Avionics (5 years) and power plant/ servo configurations (3,000 hours) will be refurbished and reintegrated into the local product assembly line. Re/upcycling opportunities for airframe carbon fibre/resin panels include shredding & pulverisation for reinforcing/filler materials for concrete/composite products, pyrolysis for retrieval of high purity carbon fibres as inputs for high performance products, and recycling into carbon fibre filaments for additive manufacturing feedstocks. When: Following first end-of-life components (2028 onwards)
Digitalisation, use of relevant Industry 4.0 technologies, cyber resilience	<input checked="" type="checkbox"/> High <input type="checkbox"/> Medium <input type="checkbox"/> Low <input type="checkbox"/> Not applicable – reason?	How/Why: Product integrates Industry 4.0 technologies, including autonomous sensing, navigation and control systems, IoT for remote monitoring, and data analytics for operational insights. The drone design utilises dual CPUs and dual IMUs for physical and logical redundancy and maintaining accuracy in the event of individual sensor failure. GNSS-denied navigation provides cyber resilience via dead-reckoning in the event of a jamming attack. EMI/EMC resistance is integrated to meet MIL-STD 461 standards, on-board avionics software is DO-178C certified (critical airborne systems) and meets MISRA and JPL (NASA) versioning and traceability standards.

OFFICIAL

Other considerations	Applicability to the business / where are they on their journey – awareness, relevance, and importance (High, Medium, Low or not applicable) and include reason if not applicable	Relevance / importance to the business for growth and scaling up - what is the opportunity - why, how and when? Or reason if not applicable
		<p>Fleet operations will be controlled from a secure ground control room with dedicated cybersecurity measures.</p> <p>When: on launch (YE 2025)</p>
Increasing productivity	<input checked="" type="checkbox"/> High <input type="checkbox"/> Medium <input type="checkbox"/> Low <input type="checkbox"/> Not applicable – reason?	<p>How/Why: Utilising innovative UAS technology streamlines logistics by providing fast, reliable, and autonomous cargo transport to remote and rural locations; reducing the need for traditional transport methods which are comparatively more labour, resource & time intensive.</p> <p>When: on-launch (YE2025)</p>
Increasing investment in design, development, research	<input checked="" type="checkbox"/> High <input type="checkbox"/> Medium <input type="checkbox"/> Low <input type="checkbox"/> Not applicable – reason?	<p>How/Why: Ongoing product development requires a significant investment in local R&D, with no similar solutions widely adopted at present.</p> <p>The airframe design, ironbird and flight testing R&D activities are, and will continue to be carried out in Australia. Applicant project is supported by the Advanced Air Mobility CRC and Swinburne Aerostructures Innovation Research (AIR) Hub.</p> <p>Delivery of the project will position Australia as a leader in advanced UAV systems and progressive remote logistics solutions. Technology can be developed towards further use cases.</p> <p>When: ongoing (2024-2030)</p>
Increasing product complexity, increased value adding	<input checked="" type="checkbox"/> High <input type="checkbox"/> Medium <input type="checkbox"/> Low <input type="checkbox"/> Not applicable – reason??	<p>How/Why: Prototype represents SOTA in UAS design for its size and payload category. I process of securing protection for intellectual property pertaining to airframe design and modularity, as well as avionics and power plant configuration. Product to meet all regulatory requirements for immediate market entry, with a view to introduce further value-add/complexity in further designs for increased payload and range/passenger capability, however these additions will have regulatory implications that must first be overcome.</p> <p>Technology is highly differentiated for use in harsh and expansive environments of remote Australia, including compatibility with remote infrastructure/roads, caretaker autopilot through</p>

OFFICIAL

Other considerations	Applicability to the business / where are they on their journey – awareness, relevance, and importance (High, Medium, Low or not applicable) and include reason if not applicable	Relevance / importance to the business for growth and scaling up - what is the opportunity - why, how and when? Or reason if not applicable
		<p>discontinuous comms accessibility and weight category selected to remove regulatory barriers.</p> <p>Design to receive iterative improvement from beta customer trials, and emergent technologies roadmapped for integration in response to customer and community needs.</p> <p>When: on-launch (YE 2025) and later iterations (2030 +)</p>
Diversity of workforce, partnerships	<input type="checkbox"/> High <input checked="" type="checkbox"/> Medium <input type="checkbox"/> Low <input type="checkbox"/> Not applicable – reason?	<p>How/Why: Applicant is majority female-founded and led with strong workplace inclusion policies. Successful delivery of the project will generate local aerospace engineering/industrial design positions, as well as operations and manufacturing roles in the supply chain (onshore airframe manufacture and product assembly).</p> <p>Development of advanced UAS technology requires a diverse team of professionals, and collaborative partnerships with both industry and academic leaders, exemplified by current partnerships with Australia Post, Swinburne University (AIRHub), AAM CRC.</p> <p>When: Current/ongoing</p>
Skills enhancement - workforce and / or leadership	<input type="checkbox"/> High <input checked="" type="checkbox"/> Medium <input type="checkbox"/> Low <input type="checkbox"/> Not applicable – reason?	<p>How/Why: Core team members already have many years of industry and leadership experience, but will continue to upskill, engage with professionals in the field, and attend relevant events for learning and knowledge sharing.</p> <p>Additional headcount in Y1-5 will produce roles to further develop sovereign aerospace capability, IoT, advanced communications and design-for-manufacture.</p> <p>When: 2025-2029</p>
Local supply chain development	<input checked="" type="checkbox"/> High <input type="checkbox"/> Medium <input type="checkbox"/> Low <input type="checkbox"/> Not applicable – reason?	<p>How/Why: Local supply chain enables quicker access to materials and components, reducing lead times and costs associated with international sourcing, especially for the airframe.</p> <p>Supports regional economic growth by creating demand for locally sourced materials and services.</p> <p>Builds resilience against global supply chain disruptions, ensuring greater reliability for ongoing operations.</p>

OFFICIAL

Other considerations	Applicability to the business / where are they on their journey – awareness, relevance, and importance (High, Medium, Low or not applicable) and include reason if not applicable	Relevance / importance to the business for growth and scaling up - what is the opportunity - why, how and when? Or reason if not applicable
		<p>Applicant will utilise local supply chain for subsystems with the exception of the avionics platform and power plant.</p> <p>When: 2025-2030 +</p>
Regional development	<input checked="" type="checkbox"/> High <input type="checkbox"/> Medium <input type="checkbox"/> Low <input type="checkbox"/> Not applicable – reason?	<p>How/Why: Applicant technology has been specifically designed to address logistical challenges faced by remote and regional communities in order to establish equitable access to essential goods and services to all Australian communities.</p> <p>Consequently, the project aims to improve connectivity, and support economic growth in underserved/regional areas.</p> <p>When: on-launch (YE2025)</p>

Growth financials and metrics

What are the primary metrics for successful growth?

Growth financials and metrics	Current (run rate)	Potential / forecast through commercialisation, growth and scaling up	By when (calendar year)
Annual turnover (sales) \$ million (end of grant/project period)	0	\$14.246M	2027
Annual turnover (sales) \$ million (FY30 forecast)	0	\$36.48M	FY30
Proportion of interstate sales %	0	100% - service delivery will predominantly encompass NT, North-Eastern WA, Northern QLD and SA, with head offices invoiced in VIC (Australia Post & TGE)	2027
Proportion of international / export sales %	0	10%	2030
Turnover from selling products %	0%	25%	2030
Turnover from selling services %	100	75%	2030
Investment in design, R&D % of sales	NA	\$4.234M total investment, R&D intensity 21.38%	2027
Profitability (EBIT, EBITDA, or equivalent) % of sales	NA	\$9.596M EBITDA, 26.3% of sales	FY30
Valuation of business (if known) \$ million	\$20M (based on most recent SAFE note)	\$39.6M (based on \$11M of tangible assets, \$3M intangibles and 1.8x revenue)	2027
Number of markets / sectors selling into	0	1 (Private delivery providers; B2B)	2025 (Dec)
Number of customers	0	4	2030
Number of management employees on payroll (FTE)	2	3	2027
Number of non-management employees on payroll (FTE)	0	4	2027
Number of local suppliers (or % by buy)	0	60.5% by buy	2025

OFFICIAL

Growth financials and metrics	Current (run rate)	Potential / forecast through commercialisation, growth and scaling up	By when (calendar year)
Number of overseas suppliers (or % by buy)	0	39.5% (by buy)	2025

Technology Readiness Level

Referring to the Technology Readiness Level (TRL) definitions used by the Australian Defence Science and Technology Group (DSTG), the innovation is currently at **TRL 4**.

Completing the proposed projects will elevate the solution to **TRL 9** (refer table below).

TRL 1	Basic Research: Initial scientific research has been conducted. Principles are qualitatively postulated and observed. Focus is on new discovery rather than applications.
TRL 2	Applied Research: Initial practical applications are identified. Potential of material or process to solve a problem, satisfy a need, or find application is confirmed.
TRL 3	Critical Function or Proof of Concept Established: Applied research advances and early-stage development begins. Studies and laboratory measurements validate analytical predictions of separate elements of the technology.
TRL 4	Lab Testing/Validation of Alpha Prototype Component/Process: Design, development and lab testing of components/processes. Results provide evidence that performance targets may be attainable based on projected or modelled systems.
TRL 5	Laboratory Testing of Integrated/Semi-Integrated System: System Component and/or process validation is achieved in a relevant environment.
TRL 6	Prototype System Verified: System/process prototype demonstration in an operational environment (beta prototype system level).
TRL 7	Integrated Pilot System Demonstrated: System/process prototype demonstration in an operational environment (integrated pilot system level).
TRL 8	System Incorporated in Commercial Design: Actual system/process completed and qualified through test and demonstration (pre-commercial demonstration).
TRL 9	System Proven and Ready for Full Commercial Deployment: Actual system proven through successful operations in operating environment, and ready for full commercial deployment.

Supporting information

Supporting information	Requested prior to meeting	Provided to Adviser	Reviewed with the business
Ownership structure	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Company overview	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Organisation structure	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Strategic plan	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Prior three-year financials	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Roadmaps (e.g. technology, digital)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Business model canvas / Lean canvas	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
SWOT summary	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

END OF REPORT