

# DE-04 ECONOMIC DEVELOPMENT GRANT SCHEME 2022/23 APPLICATION FORM



## SECTION 1 - APPLICANT DETAILS

**Business Name:** Wedgetail Aerospace

**Type of Organisation e.g. Sole Trader, Company:** Private Company

**Title of Initiative/Project:** Pilbara Drone Operational Hub - Proof of Concept (PoC)

**Contact Person for Project:** Dominic Letts

**Position Held:** Chief Operating Officer

**Postal Address:** 5 Lindsay Street Perth, Western Australia 6000

**Office Hours Telephone:**

**Mobile:** 0408 094 959

**Email Address:** dominic.letts@wedgetailaerospace.com

**Website Address:** www.wedgetailaerospace.com

**Australian Business Number:**

89 644 436 608

**Total Project Budget:**

**\$242,585**

**Amount requested (Up to 50% of total project budget):** \$121,292

## SECTION 2 - ABOUT YOUR ORGANISATION

**Please describe your organisation structure, and primary business objectives:**

Wedgetail Aerospace (Wedgetail) is a Western Australian Private Company. The founders and major shareholders are Thomas Symes, a Western Australian entrepreneur with a finance background, and, Omni Executive, a Defence, Critical Infrastructure and Aerospace Company in operation for over 10 years. Omni is a Veteran led Private Company. Tom and Omni both recognised drones as being transformational, Tom through experience and analysis of transformational technology in the capital markets and Omni through their experience in owning an operating an Aerospace business, consisting of fixed and rotary wing crewed aircraft.

Wedgetail has identified that regulation is the critical constraint to drones and that regional areas are likely to achieve regulatory approvals for their operation in commercial airspace prior to metropolitan areas. In this context, Wedgetail identified that large drones capable of carrying heavy payloads and operating for extended periods over long distances can create value for government and commercial customers in regional areas. The Commonwealth Government, through the Department of Infrastructure, has endorsed this thesis by awarding Wedgetail at Emerging Aviation Technology Partnership in 2022.

The Pilbara, is a regional area that is strategically important to Australia, generating, more than 18% of Western Australia's Gross State Product and more than \$66 billion of Gross Regional Product. Drones can create significant value for government and commercial customers performing long range intelligence, surveillance, and reconnaissance (ISR) of critical infrastructure and areas as well as conduct cargo delivery of time sensitive goods, equipment, and materials.

Wedgetail has invested years and significant capital in generating the approvals, training our people, and selecting the platforms (Drones) to bring our business to life. Locations for an operational base for the Pilbara have been identified in Karratha and our company now seeks to prove our concept to regulators, customers and stakeholders and commence operations thereafter.

Our aim is to transform how government and business conduct long range ISR and time sensitive cargo transport within the Pilbara and then use this as a springboard to expand into other regions in the State, Nation and then Internationally.

## SECTION 3 - PROJECT/ACTIVITY/DETAILS

### 3.1 Please describe the project you are planning to undertake and outline your objectives:

The project is a Proof of Concept (PoC) to demonstrate to regulators, customers, and stakeholders in the Pilbara that drones can be operated safely and effectively at long ranges and Beyond Visual Line of Sight (BVLOS) to create value by applying transformational technology for ISR and time sensitive cargo delivery.

At the end of the project, our intended outcomes are:

- Regulators are ready to approve Wedgetail drone operations in the Pilbara.
- Stakeholders are supportive of Wedgetail drone operations in the Pilbara.
- Customers are ready to commercially engage Wedgetail for drone operations in the Pilbara.
- Wedgetail is ready to execute a lease for a Drone Operational Hub in the City of Karratha.
- Wedgetail is ready to commence ongoing operations from a Karratha Operational Hub.
- Wedgetail and the City of Karratha have been promoted, locally, within the State, Nationally and potentially internationally as highly progressive future focused organisations.

The PoC includes:

- Identification and securing of a suitable drone operational hub and land areas to enable the safe launch, recovery, command, control, communications and maintenance and sustainment of drone operations.
- Identifying suitable drone mission profiles and movement corridors that meet regulatory and commercial requirements.
- Stakeholder engagement to enable support and acceptance of drone operations within the Pilbara environment.
- Mission planning and approval applications submission to the regulatory bodies, including the Civil Aviation Safety Authority (CASA), Air Services Australia, Australian Communication and Media Authority (ACMA) and others as required.
- Training and preparation of pilots and support staff to safely and effectively conduct the PoC.
- Logistics to enable the transport to and from Karratha and the sustainment, command, control, communications and administration of pilots, support staff, drones, equipment, goods, materials and consumables.
- Identification of, and communications with stakeholders and customers to invite their attendance at an event that demonstrates Wedgetail's transformational capability.
- Organisation of and conduct of the capability demonstration event.
- Post activity learnings and round out.

The PoC has been scheduled to occur immediately before the Pilbara Summit 10-11 October 2023, with the Capability Demonstration to occur immediately after the Summit on 12 October 2023. This enables maximum exposure to a wide variety of decision makers, stakeholders and media.

The Instruments of Approval from CASA for the flying operations for the PoC are the critical element to enable these types of drone operations in the Pilbara. Should Wedgetail not commence operations within 24 months from the conclusion of the PoC, then, on request, Wedgetail will provide these Instruments to the CoK with permission to share with third parties who may seek to conduct similar operations proposed by Wedgetail for this PoC.

**3.2 Please provide a clear plan for delivery of your project including key dates/timelines. If you have a project timeline, calendar or GANTT Chart to attach please do so.**

Please find attached.

**3.3 Please demonstrate the need and demand for the activity/project (Provide any economic impact data to support your case)**

The Australian Government engaged Deloitte Access Economics to conduct an Economic Development Analysis of Drones in Australia in 2020. The report is attached.

Key Findings of that report were that:

- The drone industry has the potential to increase Australia's Gross Domestic Product by \$14.5 billion from 2020 to 2040.
- Drones are projected to create up to 10,000 jobs over the next 20 years.
- It is expected that cumulative estimated cost savings from 2020 to 2050 will total \$48 billion.

Moreover, Western Australia has demonstrated world leadership in robotics and automation, specifically in the resources sector and geographically in the Pilbara. The Pilbara is home to the world's largest robot, Rio Tinto's Autohaul, as well as an array of uncrewed, autonomous, and remotely operated systems that are widely used in Industry.

The West Australian State Government, through their Economic Diversification Plan, seek to enhance diversity by leveraging from our unique strengths, including remote and autonomous systems.

Wedgetail has engaged with politicians, departments and agencies who confirm our that vision aligns with this intent and expressed support.

Wedgetail has engaged with the City of Karratha, Pilbara Chamber of Commerce's, industry groups and companies regarding our services. The interest and appetite are significant with acknowledgement that uncrewed long-range drones can provide access to more timely and accurate information with greater safety and cost benefit than the status quo. Moreover, drone delivery of time sensitive goods and materials, not only can provide safety, environmental, time and cost benefits compared to the status quo, but also has the potential to reshape the supply chain.

Wedgetail forecasts direct employment of four staff in the first year of operations in Karratha, with this having the potential to rapidly scale thereafter as the technology becomes widely adopted. A Remplan Economy Report that is attached to this submission, states that this results in a direct increase in output of **\$1.439m** with a total output, including direct, supply chain and consumption effect of **\$2.138m**.

### 3.4 How does this align to the City of Karratha's strategies (please be specific)?

The City of Karratha's (CoK) Strategic Community Plan has an aspiration to achieve the vision of transforming the City of Karratha to provide infrastructure and services to become "Australia's most livable regional city".

A detailed examination as to how our proposal aligns to the Community Plan is detailed below:

CoK Strategic Themes	CoK Goal
1. <b>Our Community</b> Inclusive and Engaged	To activate safe, healthy and livable communities
CoK Outcomes	CoK Response
1.f Connected Communities	1.f2 Employ new technologies to connect communities.

#### Wedgetail's Alignment

The City of Karratha, located in the dynamic Pilbara region of Western Australia encompasses a total land area of 15,882 square kilometres and is home to approximately 22,7161 residents. 1,535km north of Perth, the City of Karratha consists of six towns; Dampier, Karratha, Roebourne, Wickham, Point Samson and the historic village of Cossack.

Long Range Drones have the potential to better connect the people and industry within and beyond the City of Karratha through access to safer, more sustainable, timelier and cost-effective transport of goods and material. For example, drones can transport critical medical supplies and equipment from Karratha to outlying communities or collect samples or tests from communities and transport to the hospital enabling more timely and accurate diagnosis and treatment plans without the need for people to leave their community.

#### CoK Progress Measures and Wedgetails Alignment:

1. Infrastructure development – A Drone Operational Hub located in the City is transformative infrastructure that supports the generation of better connected communities.
2. Community pride and safety – Community pride can be generated through enhanced connectivity generated by the application of transformative technology that can support better safety outcomes through timelier provision of information, goods and materials.
3. Greater community involvement – Drones have the capacity to better connect communities fostering increased involvement in activities and decision making. This can be as simple as using drones to deliver the mail to outlying communities.
4. Development of funding partnerships – The City can enter a funding partnership with Wedgetail who is trailblazing the application of drones in regional areas that can achieve a range of benefits for the City as detailed in this document.
5. Health and wellbeing lifestyle choices – Drones can support improved health outcomes through better connectivity such as more rapid processing of medical tests, without the need for the patient to travel to a medical centre and or timelier delivery of medical supplies to remote areas.
6. Indigenous engagement – Improved connectivity afforded by the use of Drones can support better engagement with Indigenous communities. This connectivity enables Indigenous people to remain in community rather than travel to facilities and services that are externally provided. I can also enable Indigenous Communities to better monitor and protect their country.

### 3.4 How does this align to the City of Karratha's strategies (please be specific)?

#### CoK Strategic Themes

#### CoK Goal

- |  |  |
|--|--|
| 2. <b>Our Economy</b> well Managed and Diversified | To attract diverse and sustainable business and employment opportunities |
|--|--|

#### CoK Outcomes

#### CoK Response

- |                      |  |
|----------------------|--|
| 2a. Diverse industry | 2.a.1 Partner with key industry and business groups to advocate for investment<br>2.a.2 Support business development, growth, diversification and innovation |
|----------------------|--|

#### CoK Progress Measures and Wedgetail's Alignment

In supporting this proposal, the City will partner with a trailblazing organization, already recognized by the Commonwealth Government with an Emerging Aviation Technology Partnership, that will showcase Karratha as a progressive City for the application of innovative and transformative technology. This too will support new business development and diversification of the economy. The progress measures of new business investment, application for grants and increased local spend will result.

#### CoK Outcomes

#### CoK Response

- |                         |  |
|-------------------------|--|
| 2b. Business prosperity | 2.b.1 Be a business-friendly local government<br>2.b.2 Reduce business costs |
|-------------------------|--|

#### CoK Progress Measures and Wedgetail's Alignment

In supporting this proposal, the City will demonstrate a business friendly local government, that incentivises innovative and transformative local companies to generate economic growth and reduce business costs.

#### CoK Outcomes

#### CoK Response

- |                  |   |
|------------------|---|
| 2.d Role clarity | 2.d.1 Support and advocate for local business<br>2.d.2 Promote the region as a business destination<br>2.d.3 Position the City as an attractive place for employees |
|------------------|---|

#### CoK Progress Measures and Wedgetail's Alignment

In supporting this proposal, the City will demonstrate that it is advocating for local business. Importantly it will show that the City is a place that seeks and supports innovative and transformative technology that can shape our future, providing inspiring and future focused jobs for the Community.

### 3.4 How does this align to the City of Karratha's strategies (please be specific)?

#### CoK Strategic Themes

#### CoK Goal

2. **Our Environment** Thriving and Sustainable

To protect our natural and built environment

#### CoK Outcomes

#### CoK Response

3a. Well managed natural assets

3.a.1 Recognise and protect our natural environment  
3.a.3 Enhance visitation opportunities to natural assets through appropriate protection and management practices

#### CoK Progress Measures and Wedgetail's Alignment

Drones can conduct a range of mapping and survey that establishes a baseline of the environment and then shows change over time. This technology enables a detailed understanding of the environment allowing more timely and precise action and or improved management practices to be taken to address issues. Furthermore, drones can identify and report illegal and adverse environmental activity and provide evidence to authorities to enable response and/or prosecution. This can be done over the land and maritime environment. Wedgetail has discussed our capability with the Department of Environment and Main Roads who have expressed interest in our capability.

#### CoK Outcomes

#### CoK Response

3d. Sustainable use and management of resources

3.d.2 Continue to improve energy efficiency and pursue renewable energy opportunities to reduce our CO2 footprint  
3.d.3 Implement sustainable procurement practices

#### CoK Progress Measures and Wedgetail's Alignment

Drones that are powered by aviation liquid fuels use up to 98% than comparative crewed aircraft, Moreover, or Wedgetail's drones are battery powered enabling use of renewable energy to charge the battery. Drones support the City's goal of a reduced ecological footprint and partnering with agencies to achieve this.

### 3.4 How does this align to the City of Karratha's strategies (please be specific)?

#### CoK Strategic Themes

#### CoK Goal

2. **Our Leadership** Proactive and Accountable

To provide accessible, transparent and responsive leadership

#### CoK Outcomes

#### CoK Response

4a. Raised profile of the City

4.a.1 Achieve a strong position and identity in statewide and national media  
4.a.2 Achieve recognition as the leading regional local government in Western Australia  
4.a.3 Establish key strategic partnerships

#### CoK Progress Measures and Wedgetail's Alignment

Wedgetail is at the leading edge of drone services in the world. We are the first to achieve approval by CASA to operate large drones in commercial airspace and the first to establish regional drone operational hubs to apply this service to government and commercial customers. This has been recognized by the Commonwealth Government through the award of an Emerging Aviation Technology Partnership. By supporting this proposal, the City demonstrates that it is an innovative and future forward locality. By staging the PoC during the Pilbara Summit it enables the display of this capability, and the City's support of it, to a diverse range of State, National and International decision makers, stakeholders and media. The City's support of this proposal represents a strategic partnership with Wedgetail and supports the promotion of a strong position and identity in the media as a future focused and leading regional local council.

#### CoK Outcomes

#### CoK Response

4b. Continuous improvement and innovation

4.a.1 Establish an environment that supports continuous improvement and innovation

#### CoK Progress Measures and Wedgetail's Alignment

Support of this proposal by the City demonstrates an environment that supports innovation and a commitment to future focused technology that creates jobs of the future. These are the organisations and localities that have been shown to attract and retain talented people.

#### CoK Outcomes

#### CoK Response

4d. Strong partnerships and indigenous relations

4.d.2 Continue to engage with industry and government on key initiatives

#### Progress Measures

Support of this proposal by the City is engagement with Wedgetail and the Commonwealth Government on the key initiative of the application of emerging aviation technology that can better connect regional communities and enable improved business outcomes. Additionally, Wedgetail has the capability, and is Defence Industry Security Program certified, so as it can support Defence and Borderforce in ISR of the Pilbara. Wedgetail has contacted the Northwest Defence Alliance, Defence and Borderforce, including the Pilbara Regiment, to appraise them of our capability and impending establishment in the City of Karratha.

### **3.5 What is the potential economic impact of this activity / project and how will the success be measured?**

The macro-economic impact of drones is explained in the Deloitte/Access economics study attached to this proposal. Moreover, Energy, Mining, Oil and Gas, Main Roads, Department of Environment, Defence and others have expressed interest in utilisation of the Wedgetail's Drone Services. The immediate local impact is the generation of four local jobs to support the business, the leasing of property and facilities to support the establishment of the Operational Hub.

New technology historically takes time to embed, but once established has the potential for exponential growth.

The immediate measures of success are shown below and are as detailed in the introduction to this proposal.

At the end of the project, our intended outcomes are:

- Regulators are ready to approve Wedgetail drone operations in the Pilbara.
- Stakeholders are supportive of Wedgetail drone operations in the Pilbara.
- Customers are ready to commercially engage Wedgetail for drone operations in the Pilbara.
- Wedgetail is ready to execute a lease for a Drone Operational Hub in the vicinity of Karratha.
- Wedgetail is ready to commence ongoing operations in the Pilbara from a Karratha Operational Hub.
- Wedgetail and the City of Karratha have been promoted, locally, within the State and Nationally as highly progressive future focused organisations.

In the medium term, two to four years, the measures of success are:

- The City, Community and stakeholders have embraced Wedgetail as valuable local business.
- Wedgetail has achieved commercial success and growth.
- Regulators are satisfied with our safe operations such that a larger operational hub is required with a likely preference for this to be established at the Karratha Airport.
- Wedgetail has expanded nationally and potentially internationally, using the Karratha model as a template.

### **3.6 Please demonstrate how this activity / project represents good value for money for the City of Karratha?**

This proposal provides a unique opportunity for the City of Karratha to support a Western Australian business applying innovative and transformational technology that is a first in Australia and leading in the World. It supports the Strategic Themes and Outcomes of the City's Community Strategic Plan and provides for an opportunity to showcase Karratha as innovative and future focused place to State, National and potentially international media.

#### SECTION 4 – ACKNOWLEDGEMENT OF FUNDING

**If your application is successful, please outline all methods you would use to acknowledge the support you have received from the City. Please also outline how will you collaborate with the City for joint promotion and marketing material?**

Wedgetail will acknowledge the support received from the City in the following ways.

- Acknowledgment of the City's support in applications and submissions to regulators.
- Acknowledgment of the City's support in reports provided the Commonwealth as part of the Emerging Aviation Partnership.
- Acknowledgment of the City's support in marketing and communications in connection with the PoC. Wedgetail will collaborate with the City to best determine the form and function of this acknowledgment in the various marketing and communications material.

#### SECTION 5 – BUDGET DETAILS

**List all the expenditure and income details relating specifically to your activity/project including any supporting quotes and support of other funding partners. If this information exists in another format please attach a comprehensive budget document.**

**Please note: The City of Karratha does not provide grant funding for business operating costs (e.g. staff wages, rent, utilities and consumables)**

Please find the Budget attached.

#### SECTION 6 – OTHER INFORMATION

**We welcome further information or attachments that may assist us in the processing of your application.**

#### SECTION 7 – DECLARATION

I hereby certify that I am the authorised person of:

Business Name: Wedgetail Aerospace Pty Ltd

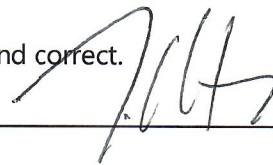
And that:

- I have read and understood the Policy & Guidelines;
- The business has all the required insurances, permits and licences to operate;
- We would be able to proceed with the project if we were not successful in the funding application

The information contained herein, is to the best of my knowledge, true and correct.

**Applicant Name: Dominic Letts**

**Signature:** \_\_\_\_\_



**Date: 18/04/2023**