ASX Announcement

Successful completion of next generation Micro Gas Turbine paves the way for commercialisation in mid-2025

Highlights:

- **Completion of design, build and test phase for the AU4, Aurora's 40kg thrust 3D printed micro gas turbine.**
- **Significant technical milestones achieved through lightweighting, parts consolidation, fuel efficiency, and simplified assembly to optimise the AU4 for use as the propulsion system for high volume unmanned aerial vehicles (UAVs).**
- **Opportunity to establish Aurora's 3D printed micro gas turbines as a benchmark in UAV and aerospace propulsion systems**
- **Aurora is currently engaging directly with international customers including global defence primes**
- **Preparations underway for increased production capability by second half of 2025**

Aurora Labs Limited ("A3D" or "Aurora" or "the Company") (ASX) a leader in additively manufactured attritable propulsion technologies, is pleased to announce the successful completion of the design, build and test phase of its AU4, 40 kilogram thrust micro gas turbine engine.

The recent increase in defence budgets internationally has increased demand for UAVs and the need for propulsion systems. Approximately 5.42 million UAV units were produced globally in 2024 with an expected CAGR of 16.3% by 2030. More recent international conflicts have seen a rapid increase in the use of UAVs, where defence forces have been pursuing 3D-printing technologies to rapidly put systems into the field more quickly and at scale. [1]

The Company is currently engaging directly with international customers including global defence primes, seeking to establish future production supply channels for the growing market.

While these discussions and test demonstrations continue, the Company has committed significant internal resources towards preparing the organisation for scaled manufacture including export market accreditation, operational documentation, production quality control and assurance, metrology, production line set up, and investing in training and upskilling staff for initial production. Completion of the initial design, build and test phase of the AU4 is an integral part of this process.

The Company is aiming to complete preparations for increased production capability through the second half of 2025.

Rebekah Letheby, CEO of A3D, commented: "*Our mission is to empower customers with cutting-edge propulsion systems. The AU4 represents a major step forward in our technology journey and is now progressing towards potential first purchase orders for our additively manufactured micro gas turbine*

product line. It's exciting to see this momentum as A3D continues to advance defence propulsion technology in a rapidly evolving market. As demand for high-performance propulsion systems grows, A3D is positioning itself as a key player in this emerging segment."

AU4 Micro Gas Turbine, sitting alongside the AU2

The AU4, a 40kg capable thrust model, is designed and manufactured in house using Aurora's industrial print services, and complemented by select off-the shelf components, such as an external fuel pump. This tight control over the manufacturing and supply chain has allowed for engineering optimisations that directly enhance production scalability.

The AU4, as an advanced propulsion system, leverages additive manufacturing to deliver exceptional performance and efficiency. Engineered specifically for attritable UAV applications, AU4 offers a high-performance, cost-effective, and scalable solution tailored to meet the evolving demands of modern aerospace systems. Its additive manufacturing foundation enables rapid customisation, reduced lead times in build and assembly, and optimised component design, making AU4 an ideal propulsion choice for both

defense and commercial UAV technologies.

One of the key achievements in the design and manufacture of the AU4 is a significant reduction in part count of the engine, streamlining the entire assembly process. The case design of the micro gas turbine now integrates the exhaust nozzle, engine mounts, and gas seal, removing 23 parts if compared to a traditionally made engine. Additionally, the combustion chamber assembly has been refined with 17 fewer components, contributing to a total reduction of 40 parts across the AM-built AU4. These reductions not only improve ease of assembly but also contribute to the overall weight savings compared to conventionally manufactured counterparts.

Assembly Lines for AU4 Micro Gas Turbines

Efficiency has also seen a measurable improvement, with lower fuel consumption optimised during run-time. The implementation of novel geometry within specified engine components, along with novel AM-enabled weldments, has contributed to superior thermal management, ensuring better energy utilisation and therefore facilitating extended operational endurance. This results in a measured reduction of fuel use at 6%, compared to a traditional engine counterpart.

Paramount in the Design Team's thinking is the focus on sovereign manufacture through consideration of supply chain risks for both Australian and international manufacturers. Continuity in supply of materials and 3rd party supplied parts has been prioritised throughout the design and manufacturing process.

Advancements achieved on the AU4 over the last few months will progress the Company to the next stage of infield development, focusing on verification testing to refine operational reliability. Work will be undertaken with direct select customer engagement to expedite evaluation of engine performance prior to full integration into operational platforms.

Aurora's Target Market for Turbines

The addition of the AU4 micro gas turbine model is a direct response to market learnings gained by the Company over the last 18 months, listening to customer feedback both in Australia and internationally. With both the AU2 and AU4 models now in the Company's portfolio, A3D is confident that its portfolio effectively addresses a substantial portion of the drone propulsion market within the global defence sector, ensuring sufficient capability to meet current drone travel range requirements. Beyond 2025, A3D plans to expand its portfolio by introducing larger propulsion systems designed to support extended-range drone applications.

The AU4 program is a testament to Aurora Labs commitment to leading-edge propulsion technology, leveraging the benefits of additive manufacturing to push beyond traditional design limitations. With plans for full-scale production and increasing commercial interest, the Company is now engaging with potential customers throughout Europe to bring the AU4 into service-ready application as we gear up for production readiness in the latter half of 2025. Aurora looks forward to securing commercial agreements in a growing market through Europe, as geopolitical tensions look to increase defence spending. This opportunity has the possibility of establishing A3D's micro gas turbines as a benchmark in UAV and aerospace propulsion systems as the Company moves towards delivering further defence focused additively manufactured (AM) propulsion technology and delivering innovative solutions to meet the evolving needs of our customers.

[1]International Institute for Strategic Studies 2025 The Military Balance 2025: Defence Spending and Procurement Trends

Ends

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ACN: 601 164 505

Approved for release by the Company's Board of Directors.
For further information, please contact: Rebekah Letheby, Chief Executive Officer
+61 (0)8 9434 1934 or by email enquiries@auroralabs3D.com

ABOUT AURORA LABS

Aurora Labs Limited ("the Company"), an industrial technology and innovation company that specialises provision of 3D metal printed parts for defence, oil and gas, and resources applications, the development of 3D metal printers, powders, and associated intellectual property.

Aurora Labs is listed on the Australian Securities Exchange (ASX: A3D)

FORWARD LOOKING STATEMENTS

This announcement contains forward-looking statements which incorporate an element of uncertainty or risk, such as 'intends', 'may', 'could', 'believes', 'estimates', 'targets' or 'expects'. These statements are based on an evaluation of current economic and operating conditions, as well as assumptions regarding future events.

These events are, as at the date of this announcement, expected to take place, but there cannot be any guarantee that such events will occur as anticipated or at all given that many of the events are outside Aurora's control.

Accordingly, Aurora and the directors cannot and do not give any assurance that the results, performance or achievements expressed or implied by the forward-looking statements contained in this announcement will actually occur. For further information, please contact: enquiries@auroralabs3D.com