

ASX Release

9 November 2020

3DA, PPK and Deakin University establish new Strategic Alloys JV.

HIGHLIGHTS

- **Amaero subsidiary, Amaero Alloys Pty Ltd, has entered a Joint Venture Research Agreement (JV) with PPK Group Limited subsidiary, PPK Aust Pty Ltd, and Deakin University, to develop a super strength aluminium alloy.**
- **The JV parties have incorporated Strategic Alloys Pty Ltd to undertake this advanced materials project, with Strategic Alloys owned 45% by Amaero Alloys Pty Ltd, 45% PPK Aust Pty Ltd, and 10% Deakin University.**
- **The new super strength aluminium alloy will include Boron Nitride Nanotubes (BNNT) in its formulation, which acts as a nano-reinforcement in certain metals, significantly improving mechanical properties.**
- **The research will be undertaken at Amaero's manufacturing plant and R&D Laboratories at Notting Hill, Victoria, in addition to Deakin University in Geelong.**
- **BNNT Technology, a subsidiary of PPK Group Limited, is a leading manufacturer and supplier of high grade BNNT products.**
- **Multiple applications exist for super strength aluminium with industries including aerospace and defence continually seeking materials that are lighter, stronger and more durable.**
- **The research and development for the JV will commence in November 2020, with initial material validation expected in early 2021.**
- **The JV is an exciting opportunity to develop this revolutionary technology in Australia and create new industry, employment, products and exports for years to come.**

Amaero International Limited (**ASX:3DA**) ("**Amaero**" or the "**Company**") a specialist in metal additive manufacturing (3D printing) for the defence, aerospace and tooling sectors, is pleased to announce that the Company's subsidiary, Amaero Alloys Pty Ltd, has entered a Joint Venture Research Agreement ("**JV**") with PPK Group Limited (ASX:PPK) subsidiary, PPK Aust Pty Ltd, and Deakin University ("**JV Parties**"), with the JV Parties incorporating Strategic Alloys Pty Ltd ("**Strategic Alloys**") to undertake this advanced materials project. Strategic Alloys is owned 45% by Amaero Alloys Pty Ltd, 45% PPK Aust Pty Ltd, and 10% Deakin.

The JV involves creating a new super strength aluminium alloy that includes Boron Nitride Nanotubes (BNNT) in its formulation, acting as a nano-reinforcement in certain metals, significantly improving mechanical properties. BNNT is a revolutionary nanomaterial that is stable at temperatures far in excess of the melting point of aluminium and other metals, and is one of the strongest materials known.

Commenting on the JV, Amaero International Limited CEO, Barrie Finnin, said: "The Joint Venture between Amaero, PPK Aust Pty Ltd, and Deakin University, is a new partnership in materials development

that will give rise to new IP and create opportunities for high end applications across the aerospace and defence industries as well as some other high performance markets. The JV aims to develop this revolutionary technology in Australia and create new industry, employment, products and exports for many years to come.”

Amaero recently announced the development of and subsequent patents relating to Amaero’s high performance, High Operating Temperature (HOT) Aluminium alloy, “Amaero HOT Al”, developed by researchers at Monash University, Australia’s largest university, with which Amaero collaborates for the development of additive manufacturing technology. BNNT and Deakin have previously collaborated on research in Titanium/BNNT Alloys that have demonstrated remarkable strength and durability. The JV Parties aim to draw upon this prior experience and research, with the aim of developing new alloys with outstanding performance.”

The research will be undertaken at Amaero’s manufacturing plant and R&D Laboratories at Notting Hill, Victoria, in addition to Deakin University in Geelong,

The JV is also strongly supported by BNNT Technology Limited, a company leading the development, manufacture and commercialisation of BNNT, and subsidiary of PPK Group Limited with head offices in Brisbane.

Commenting on the JV, BNNT CEO, Mark Winfield, said: “We are looking forward to working with Amaero on this project, it is an important step in demonstrating the benefits of BNNT additions to alloys that will provide valuable data for clients interested in the unique properties that can be delivered”

Multiple applications exist for high strength aluminium alloys, with industries including sporting goods, auto racing, aerospace and defence, continually seeking materials that are lighter, stronger and more durable. The global aerospace and defence market is estimated to be valued at US\$1600 billion in the year 2025, growing at a CAGR of 3.5% in the period 2019 to 2025.¹

The research for the JV will commence in November 2020 and the Company expects initial material validation in early 2021.

David Hanna
Chairman
Amaero International Limited

This announcement has been approved and authorised to be given to the ASX by the Board of Amaero.

For further information, please contact:

Barrie Finnin
Chief Executive Officer
+61 (0) 3 9905 9847
info@amaero.com.au

Jane Morgan
Investor Relations
+61 (0) 405 555 618
jm@janemorganmanagement.com.au

Zack McLennan
Defence Industry Media
+ 61 (0) 434 996 461
zmclennan@lunik.com.au

¹ <https://www.prnewswire.com/news-releases/global-1600-bn-aerospace--defence-market-outlook-to-2025-boom-in-commercial-aircrafts-surge-in-global-airline-traffic-rise-in-military-expenditure-300930703.html>

About Amaero International Limited

Amaero International Limited is an Australian-based company that manufactures large format complex components in metal with laser-based additive manufacturing processes, commonly known as 3D printing.

The principal activity of Amaero is the provision of end to end additive manufacturing solutions in terms of services, equipment and technology to its key clients in the Aviation Defence and Space sectors and the Tool and Die industry.

Amaero has worked with many of the world's leading manufacturers of aerospace and defence products in both an R&D and manufacturing capability and has a demonstrated ability to deliver aviation and military specification 3D printed alloy critical operation components.

Amaero was established with the support of Monash University in 2013 to take advantage of commercial opportunities identified by the Monash Centre for Additive Manufacturing (MCAM). Amaero is co-located with MCAM in Melbourne Australia. It operates two additional facilities, in Adelaide, South Australia, and El Segundo, California, USA.

Disclaimer and Explanatory Notes

Forward Looking Statements

This document may include forward looking statements. Forward looking statements include, but are not necessarily limited to, statements concerning Amaero's planned operational program and other statements that are not historic facts. When used in this document, the words such as "could", "plan", "estimate", "expect", "intend", "may", "potential", "should" and similar expressions are forward looking statements. Although Amaero believes its expectations reflected in these are reasonable, such statements involve risks and uncertainties, and no assurance can be given that actual results will be consistent with these forward-looking statements. Amaero confirms that it is not aware of any new information or data that materially affects the information included in this announcement and that all material assumptions and technical parameters underpinning this announcement continue to apply and have not materially changed