Aurora Labs®
Empowering Industry to Revolutionise Manufacturing

1 July 2020

ASX Announcement

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Review of Printing Technology Completed - 12 Month Development Pathway Set for RMP-1 Printer

- A3D completes technology review confirming current status and 12-month pathway towards proving '*commercial readiness*'
- COVID-19 impacts forcing revision to A3D commercialisation timing
- Strategy shift from '*manufacture and distribute*' printers to '*partnership, license and royalty*' business model
- Focus on most difficult parts to print for customers which provide the highest level of commercial advantage
- Key emphasis on delivering additional 3rd party commercialisation agreements

Aurora Labs Limited ("**A3D**" or "**the Company**") (ASX:A3D), is pleased to announce the completion of a thorough internal review of the Company's Rapid Manufacturing Technology (**RMT**) to print 3D metal products.

With a backdrop of the current COVID-19 pandemic, this review process has involved Board, management and staff to clearly identify the current status of the technology, develop a pathway and 12 month plan to solve outstanding technical challenges and prove the Company's flagship RMP-1 Printer performance for commercial readiness.

A3D Chairman Grant Mooney stated today;

"We have completed an exhaustive review of the Company's printing technology to determine exactly where the technology is at today and what we need to do over the coming 12 months to advance the technology to a state of commercial readiness. This includes testing of the print parameters, upgrade of the fume extraction system and customer print specifications which will allow for measurable improvements in the printer's performance.

Our competitive advantage lies in the speed of our printer and our goal is to adopt a customer centric approach, working directly with existing customers and use their parts to further develop the RMP-1 technology, hardware and software. Our aim is to be commercially ready at the end of the next 12 months with the goal for the technology to be commercially proven by then.

While there have been many learnings in this process, the restructured Board and Management Team have a clear vision on what is needed to reach our objectives and we are equally excited by the challenges and goals that lay ahead in 2020-21."

Current Status

A key objective of the technology review was to determine the current status of A3D's RMT printing technology and to identify and address the key remaining challenges to prove A3D's competitive advantages, achieve customer acceptance, and deliver a technology package that is commercial ready.

Milestones in the development of RMT to date are shown in the timeline below:

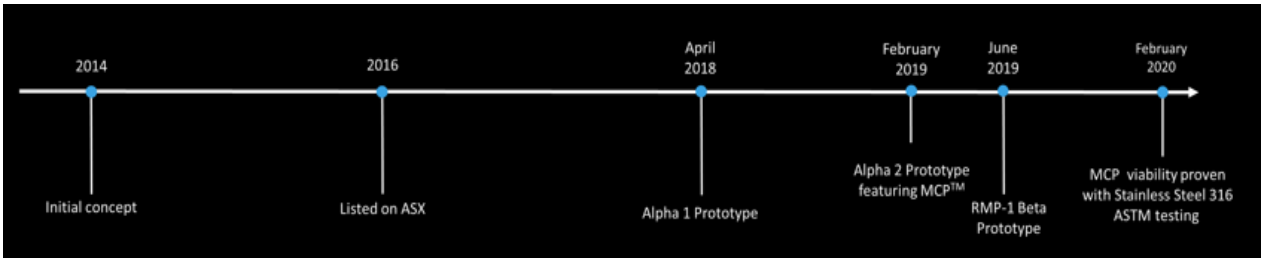

Diagram 1: RMT Development Timeline 2014 – 2020

The work undertaken using the Company prototypes, Alpha, Alpha 2 and RMP-1 Beta, provided the platform A3D used to prove and optimise the technology developed to date that will be included in a commercial RMP-1 printer. Notable achievements include:

- Printing of various parts including cubes and tensile bars for testing, demonstration parts and industrial parts in; 17-4PH steel, 316L stainless steel, titanium, and aluminium. The range of parts includes large and small overall dimensions and thick and thin wall features printed at high density.[1]
- Speed tests have been performed for simple shaped and low-density parts demonstrating improvements through scale-up of A3D RMT and the potential production rate benefits of RMT.[2]
- The Company's breakthrough Multi-Layer Concurrent Printing (MCP) technology has been tested using 316L grade stainless steel to comply with American Society of Testing and Materials (ASTM) Standards.[3]
- Printing hours logged on Alpha 2 and RMP-1 Beta to date have demonstrated progress towards commercial level hardware and software reliability and repeatability.

The technology review identified obstacles that the Board considers may have inhibited overall progress to date and highlighted remaining operational and technical challenges that need to be addressed. For example, in the past, multiple competing activities were imposed upon the Company's sole RMP-1 Beta Printer (technology research/printer developments/enhancements as well as time required for printing parts for end users and joint ventures). As a result, time available for continued core technology development was limited and the progress on delivery of a commercial ready printer was delayed. The Board and management made the difficult decisions required to adjust for COVID-19 and the new interim CEO and the remaining highly skilled core technical team will now focus almost exclusively on addressing the remaining RMP-1 and MCP technical challenges that are intended to move the technology closer to commercialisation.

One of the key remaining challenges the review identified is the print bed fume extraction limitations within RMP-1 Beta and resolution. The development and procurement of new hardware to address this issue will require significant lead time (up to 6 months). Improving the extraction is a key enabler to achieving improved performance offered by MCP, as a result, the Company will pause MCP development on RMP-1 and use RMP-1 to address and refine other technical deliverables required to achieve customer specific commercial requirements. The goal is to work directly with existing customers and use their parts to further develop the RMP-1 technology, hardware and software. Concurrently some specific MCP development activity will be conducted using Alpha 2 while RMP-1 hardware upgrades are undertaken.

2020-21 Technology Pathway

Following the completion of the technology status review, Board and Management have laid out a technology development pathway for the next 12 months to move the RMP-1 Printer closer to commercial readiness.

Commercial readiness will be achieved by concurrently developing the technology and demonstrating performance and commercial capabilities on specific customer printing projects using the current RMP-1 Beta inhouse machine. Primary development focus will be driven by customer requirements for stainless steel and secondarily for aluminium parts, with key benchmarks for success determined by achieving specified material quality, functional requirements and cost of production targets set by customers for their industrial parts. Increased speed is considered the Company's unique competitive advantage. A3D's new focus is to deliver improved printer speed whilst also delivering on all customer performance requirements.

The new plan will cease broad based marketing for the next twelve months and will focus on a few specific customers and partners who have the most difficult parts to print, complex shapes, containing thick and thin walled sections; parts that provide the highest level of commercial advantage. Working on the hardest parts increases the challenge but also serves to quickly identify any remaining technical issues with RMT, and accelerate resolution of these issues on all aspects of the Company's technology, while delivering finished parts to customers that meet requirements. This will prove A3D's unique capabilities and competitive advantage, and lead to securing long term business relationships and commercial contracts.

The Company's new customer centric focus is based on existing programs with a number of large companies and partnering arrangements including Granges and the AdditiveNow joint venture. Incremental successes will be measured using customer feedback and independent testing and verification. Some of these programs are currently underway and customer/partner feedback has been valuable and has helped to shape the Company's forward planning and key milestone development. The customer centric approach is also intended to help lay the foundations for A3D's ongoing MCP and large-scale format printer development.

Key Pathway Milestones

The Company has adopted a simple 'Lily Pad' approach when plotting the pathway to commercial readiness for the RMP-1 Printer over the next 12 months. Using the Lily Pad approach, A3D will achieve success by making a series of small developmental jumps from one pad to another, quickly building internal confidence and capability with each step, and with each achievement, heightening customer interest in the technology along the way. The technology status review revealed that accelerated technical development is required to achieve the Company's commercial goals and objectives. There is still much to do, and the Company's goals cannot be achieved in one big leap but will by building on smaller jumps, achieving one success after another.

A series of key milestones have been defined, each integral to the performance of the RMP-1 Printer. These milestones are summarised below:

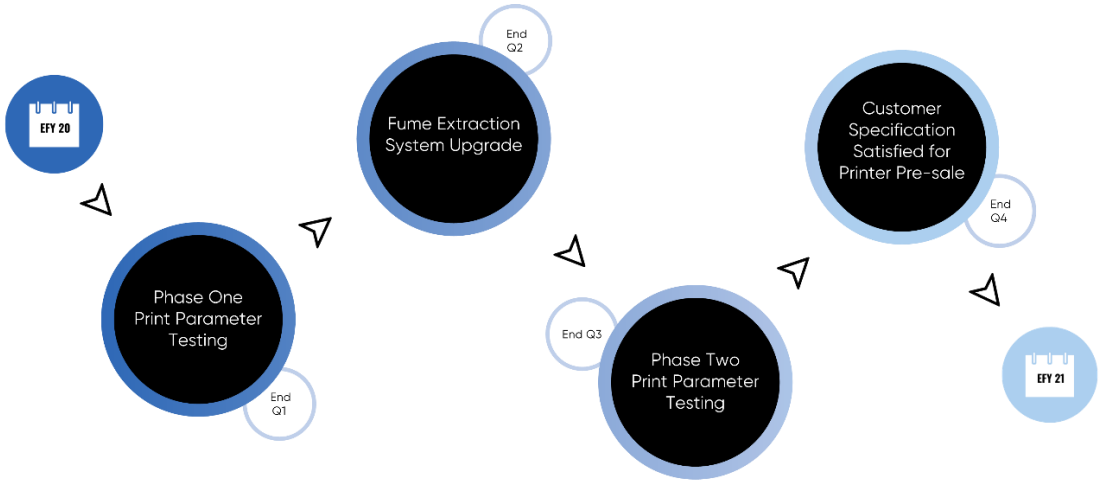

Diagram 2: A3D Technology Pathway

Phase 1

Print Parameter Testing; continued development through printing a comprehensive series of test cubes using a full range of printer input parameters establishing an extended baseline of stable printer operation and performance specifications which are validated by internal and external quality checks. This is important because it allows development of a capability map that can be linked to specific customer requirements which will allow A3D to target specific customers. It is currently focused on printing of thin walled test parts and quality testing to validate functional integrity for specific customers.

Fume Extraction System Upgrade: performing R&D and engineering activities to address known performance challenges in fume extraction sub-systems. These activities will span concept development and testing, prototype development and testing, and engineering and implementation of proven hardware and software solutions. These activities are intended to result in measurable improvements in printer performance.

Phase 2

Print Parameter Testing; baseline stable print parameters will be retested after each system upgrade to assess impact of upgrades and confirm optimised print parameter sets for simultaneously printing thin walls and thick walls.

Customer Print Specification: utilising an optimised parameter set to print a series of full-size customer parts and undertake full part print quality and functionality testing and cost modelling to demonstrate suitable, repeatable and economic commercial viability and clear competitive advantage.

These milestones will run concurrently and be interdependent. The Company will look to report on these milestones at regular intervals in order to demonstrate progress. As with all development, the process will not necessarily be linear and may require iterations, loops, and repeated steps. Delays and technical difficulties are commonplace in developing any new technology. These additional steps may impact achievement of milestones. The Board, management and the A3D team are united and committed on delivering on the timing and the milestones.

Commercialisation Strategy

Adjusting to COVID-19, the Company has been forced to reassess plans to commercialise the RMP-1 printer. The restructure of the business and heavy capital impost for large scale manufacture, coupled with the engineering demands of design for manufacture, has led the Board to form the view that the fastest and most cost efficient way to achieve overall commercial success is by forming strategic partnerships with Original Equipment Manufacturers (OEMs) and/or major industry players that desire to be in the metal 3D printer business, and have the capacity to partner with A3D and assume or at least share the responsibility for printer manufacture, sales and distribution. Adopting this new strategic partnering strategy has enabled the Company to reduce a large part of its operational cost base such as Sales & Marketing, Printer Manufacturing capabilities and ancillary technology divisions.

The Company will continue to cultivate and identify additional strategic partnership opportunities throughout the technology development pathway, targeting international OEMs and others that can assume the production and sales and marketing responsibilities under licencing arrangements, once the technology is commercial ready. The potential for A3D to manufacture printers will continue to be an option, depending on business conditions and funding.

The Board considers this approach is merely a revised focus on key aspects of the Company's existing business activities and is consistent with the Company's commercial objectives.

Ends

Approved for release by the Company's Board of Directors.
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[1]Refer ASX Announcements 20 Nov 2019 "Aurora Labs Technology Update" & 1 April 2019 "Aurora Labs' Rapid Manufacturing Technology again pushes the boundaries of 3D printing"
[2]Refer ASX Announcements 23 September 2020 "Aurora Increases Rapid Manufacturing Technology (RMP1) Speed to 350kg per day" & 15 February 2019 "Aurora Labs' Rapid Manufacturing Technology (RMT) Proves Scalability at 55 Times Market Speed"
[3]Refer ASX Announcement 18 February 2020 "Major Step Towards MCP™ Process Validation"

ABOUT AURORA LABS

Aurora Labs Limited ("the Company"), an industrial technology and innovation company that specialises in the development of 3D metal printers, powders, digital parts, and their 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