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AML3D LIMITED (ASX: AL3)

SEPTEMBER 2021 QUARTERLY ACTIVITIES REPORT AND APPENDIX 4C

AML3D Limited (ASX: AL3) ("**AML3D**" or "**the Company**"), a leader in large scale 'Additive Metal Layering' 3D printing, is pleased to provide the Quarterly Activities Report and Appendix 4C for the September 2021 Quarter (Q1FY22).

AML3D has laid the foundation for commercialisation and sustainable revenue, with a continued focus on research and development ("R&D") to drive process optimisation capability. Over Q1FY22, both domestic and international border closures have proved problematic for the business. Potential customer interactions were largely limited to virtual tours and online demonstrations, which has in turn delayed the completion of a number of contract manufacturing jobs due to the lack of onsite inspections and certifications of printed parts in accordance with customer specifications.

KEY HIGHLIGHTS DURING THE QUARTER

Prototype Testing of Next-Gen Body Armour Expanded

An extension to the Stage 2 trials announced in December 2020 has been agreed with Lightforce Australia Pty Ltd ("Lightforce") for its next-generation 'made-to-fit' titanium body armour prototype trials. Results of the first phase of the Stage 2 testing scope identified additional opportunities across the ballistics range and testing plate parameters. This has resulted in the expansion of the initial testing scope to accommodate this broader range. Both AML3D and Lightforce remain focused and committed to progressing toward a commercial outcome.

Breakthrough Welding Wire Composition Project

Wire Arc Manufacturing (WAM®) welding trials are continuing to be successful. These trials are undertaken on an industry scale using innovative new alloy compositions, which is enabling access to new industry segments and promising exciting opportunities in the area.

Deakin University has been investigating and trialling the effect of Scandium as a strengthening element for existing aluminium welding wire. These trials have been undertaken at AML3D and have created high strength commercially viable aluminium-scandium compounds, which will remove the need for age hardening heat treatment. The new alloy composition will deliver high strength, corrosion resistant WAAM structures, bespoke to AML3D's WAM® technology.

As the project enters its final six months, its success will enable many new applications for WAM®, with the automotive, resources (mining, oil & gas) and broader transport industries (such as shipbuilding) showing strong interest in high strength aluminium products.

This project will expose AML3D to new target industries and be rolled out to AML3D's current target markets of Asia Pacific (incl. Japan, South Korea), Europe (Germany, France & UK), and North America.



With the potential to generate new Australian owned intellectual property, the success of the project is expected to provide another competitive advantage for AML3D, increasing revenue prospects for the company. The success of the new development is expected to significantly increase current opportunities in both printer sales and contract manufacturing services.

AML3D also sees this project as increasing its already strong collaboration with the University sector. The Institute for Frontier Materials (IFM) at Deakin University is recognised both nationally and internationally for developing advanced materials for commercial applications. AML3D will look to build upon this strong collaboration with Deakin University with the development of a range of purpose specific alloys for WAAM applications as well as providing unique facilities and capabilities to assist in their growth.

DNV Certification for Panama Chock

Keppel Technology & Innovation (“KTI”) received a verification certificate for a 3D printed deck mounted type Panama Chock (SWL150Ton) from DNV’s Global Additive Manufacturing Technology Centre of Excellence in Singapore. The component, which is intended for non-class maritime applications, is the world’s largest 3D-printed shipboard fitting.

Panama Chocks are large shipboard fittings for towing and mooring, traditionally manufactured by casting, and are welded to a ship as a supporting hull structure. This component was manufactured by AML3D using the WAM® process which incorporated medium strength structural steel grade ER70S-6 wire feedstock.

The verification by DNV follows extensive research, production and testing by KTI with end users Keppel Offshore & Marine (“Keppel O&M”) and confirms that the component has met all the primary test requirements in KTI’s project material specification with satisfactory results.

Throughout the production and testing processes, there was close and collaborative engagement between DNV, KTI and AML3D. Factors such as functional specifications, safety, testing procedures and acceptance criteria were all subjected to scrutiny by experts.

Ongoing Investment in Technology

Investment in the development of the Company’s patented technology to drive process optimisation capability continued with further milestones achieved regarding WAMSoft®, user interface enhancements and programmable logic controllers. IIOT capability which enables remote assistance to customers is matured and continues to be optimized.

Recent developments with high strength alloy metals have been identified from the joint project between AML3D and Deakin University’s IFM. The aluminium project has presented positive high strength results which are currently being extended into next year through validation trials. This project has additionally presented further opportunity for ground breaking alloys with commercial opportunity currently being scoped for commercial trials. These additional programs and trials will give progressive results over the next six months.

3D repair technology has been developed through the use of laser scanning for various commercial customer opportunities. This technology has been trialled successfully and upgrades to WAMSoft® are well in progress.

The hybrid WAM® machining project is currently in engineering and on track for prototype and trialling mid to late next year. The first stages of the stress prediction software tool have progressed well through studies with CSIRO. Second stage software development and user interface with materials database is currently being scoped and will commence early next year. A commercial version is expected by mid to late 2022.

Twin wire application and enhancements for our ARCEMY® units also remained a key focus during the quarter. With deposition rates approaching 30 kgs per hour, initial material properties meet global acceptance standards and the Company expects certified prototypes to be developed early next year including Lloyds Register certification.



Financial

Cash receipts from customers of \$95,000 for the quarter were down on prior quarters, mainly due to the inability to interact with customers and delays driven by border restrictions. Receipts for the quarter did however include the delivery of a printed part to The Boeing Company which will now be tested by Boeing internally.

As a result of the decline in customer activity, cash outflows from operating activities have been progressively wound back over the quarter, with the ongoing cost base now better aligning capacity to current and expected medium term demand. Payments for research and development activities however remained consistent with prior periods at \$523,000 in accordance with the Company's ongoing investment in technology mandates.

Use of Funds

Pursuant to Listing Rule 4.7C2, the comparison of the Company's actual expenditure since listing on the ASX on 20 April 2020 against the Use of Funds as set out in its Prospectus is summarised as follows:

Use of Funds under Prospectus		Funds allocated under the Prospectus	Funds expended to 30 September 2021
Singapore Bureau establishment	1	4,270,000	808,878
Relocation and expansion of Adelaide facility	2	2,840,000	3,360,363
Development of integrated print/machining	3	400,000	53,923
IP protection	4	400,000	83,597
Unallocated working capital - Adelaide		950,000	950,000
Unallocated working capital - Singapore	1	1,100,000	-
Expenses of the offer		1,100,000	1,110,198
Total		11,060,000	6,366,960

- 1. Singapore Bureau Establishment:** Singapore opportunities are continuing, however, they are being hampered by restrictions imposed by COVID-19.
- 2. Relocation and Expansion of Adelaide Facility:** The relocation and expansion of the Adelaide facility culminated in the official opening of the facility on 9 July 2021 by the Hon David Pisoni MP, Minister for Innovation and Skills. A portion of funds under the Prospectus for the Singapore Bureau establishment has been reallocated to expand the Adelaide facility to provide greater local capacity.
- 3. Development of Integrated Print/Machining:** Initial research, planning, and concept design has been undertaken with expenditure to be incurred in line with the Company's internal program schedule.
- 4. IP Protection:** AML3D has secured an Australian Patent 2019251514 for its WAM® process, with subsequent confirmation of the granting of a WAM® patent in South Korea and New Zealand. Securing of patents in other key markets, including Europe, the UK and the USA is progressing.

Related Party Payments

Pursuant to Listing Rule 4.7C3, the Company confirms the following related party payments made during the quarter:

- The Company engaged the services of a company controlled by Mr Sales' sister to provide IT services. These services were conducted on standard commercial terms. Payments for these services for the quarter were \$3,055.



Outlook

Whilst restrictions imposed as a result of the pandemic have hampered recent activities, AML3D remains focused on its commercialisation pathway, continuing to build a strong customer pipeline across both ARCEMY® module sales and contract manufacturing.

After period end, ST Engineering confirmed its intention to purchasing the ARCEMY® module currently on rent, with final payment expected prior to the end of FY22. Discussions are now progressing with this customer as to how AML3D can best support its printing requirements post sale and how they may assist us in growing our presence in the Singapore and surrounding markets.

Furthermore, a purchase order for the sale of an ARCEMY® module was received from the University of Queensland. Work will commence immediately on the construction of the module with an expected delivery date prior to the end of Q2.

Numerous quotes for ARCEMY® module purchases remain active with further customer acceptances expected over the coming quarters. Orders for printed parts continue to be received with customers continuing to evaluate and validate the improved properties of WAM® printed parts.

This announcement has been authorised for release by the Board of AML3D.

For further information, please contact:

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About AML3D Limited

AML3D Limited, a publicly listed technology company founded in 2014, utilises new technologies to pioneer and lead metal additive manufacturing globally. Disrupting the traditional manufacturing space, AML3D has developed and patented a Wire Additive Manufacturing (WAM®) process that metal 3D prints commercial, large-scale parts for Aerospace, Defence, Maritime, Manufacturing, Mining and Oil & Gas. AML3D provides parts contract manufacturing, from its Technology Centre in Adelaide Australia, and is the OEM of ARCEMY®, an industrial metal 3D printing system that combines IIoT and Industry 4.0 to enable manufacturers to become globally competitive.

Appendix 4C

Quarterly cash flow report for entities subject to Listing Rule 4.7B

Name of entity

AML3D Limited

ABN

55 602 857 983

Quarter ended ("current quarter")

30 September 2021

Consolidated statement of cash flows	Current quarter \$A'000	Year to date (3 months) \$A'000
1. Cash flows from operating activities		
1.1 Receipts from customers	95	95
1.2 Payments for		
(a) research and development	(523)	(523)
(b) product manufacturing and operating costs	(310)	(310)
(c) advertising and marketing	(53)	(53)
(d) leased assets	-	-
(e) staff costs	(530)	(530)
(f) administration and corporate costs	(358)	(358)
1.3 Dividends received (see note 3)	-	-
1.4 Interest received	2	2
1.5 Interest and other costs of finance paid	(7)	(7)
1.6 Income taxes paid	-	-
1.7 Government grants and tax incentives	-	-
1.8 Other (provide details if material)	-	-
1.9 Net cash from / (used in) operating activities	(1,684)	(1,684)

2. Cash flows from investing activities		
2.1 Payments to acquire or for:		
(a) entities	-	-
(b) businesses	-	-
(c) property, plant and equipment	(101)	(101)
(d) investments	-	-
(e) intellectual property	-	-
(f) other non-current assets	-	-

Consolidated statement of cash flows		Current quarter \$A'000	Year to date (3 months) \$A'000
2.2	Proceeds from disposal of:		
	(a) entities	-	-
	(b) businesses	-	-
	(c) property, plant and equipment	-	-
	(d) investments	-	-
	(e) intellectual property	-	-
	(f) other non-current assets	-	-
2.3	Cash flows from loans to other entities	-	-
2.4	Dividends received (see note 3)	-	-
2.5	Other (provide details if material)	-	-
2.6	Net cash from / (used in) investing activities	(101)	(101)

3.	Cash flows from financing activities		
3.1	Proceeds from issues of equity securities (excluding convertible debt securities)	-	-
3.2	Proceeds from issue of convertible debt securities	-	-
3.3	Proceeds from exercise of options	10	10
3.4	Transaction costs related to issues of equity securities or convertible debt securities	-	-
3.5	Proceeds from borrowings	-	-
3.6	Repayment of borrowings	(44)	(44)
3.7	Transaction costs related to loans and borrowings	-	-
3.8	Dividends paid	-	-
3.9	Other (provide details if material)	-	-
3.10	Net cash from / (used in) financing activities	(34)	(34)

4.	Net increase / (decrease) in cash and cash equivalents for the period		
4.1	Cash and cash equivalents at beginning of period	7,201	7,201
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(1,684)	(1,684)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	(101)	(101)

Consolidated statement of cash flows		Current quarter \$A'000	Year to date (3 months) \$A'000
4.4	Net cash from / (used in) financing activities (item 3.10 above)	(34)	(34)
4.5	Effect of movement in exchange rates on cash held	-	-
4.6	Cash and cash equivalents at end of period	5,382	5,382

5.	Reconciliation of cash and cash equivalents at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts	Current quarter \$A'000	Previous quarter \$A'000
5.1	Bank balances	5,382	5,382
5.2	Call deposits	-	-
5.3	Bank overdrafts	-	-
5.4	Other (provide details)	-	-
5.5	Cash and cash equivalents at end of quarter (should equal item 4.6 above)	5,382	5,382

6.	Payments to related parties of the entity and their associates	Current quarter \$A'000
6.1	Aggregate amount of payments to related parties and their associates included in item 1	3
6.2	Aggregate amount of payments to related parties and their associates included in item 2	-

Note: if any amounts are shown in items 6.1 or 6.2, your quarterly activity report must include a description of, and an explanation for, such payments.

Quarterly cash flow report for entities subject to Listing Rule 4.7B

7. Financing facilities	Total facility amount at quarter end \$A'000	Amount drawn at quarter end \$A'000
<i>Note: the term "facility" includes all forms of financing arrangements available to the entity. Add notes as necessary for an understanding of the sources of finance available to the entity.</i>		
7.1 Loan facilities	-	-
7.2 Credit standby arrangements	-	-
7.3 Other (please specify)	-	-
7.4 Total financing facilities	-	-
7.5 Unused financing facilities available at quarter end		-
7.6 Include in the box below a description of each facility above, including the lender, interest rate, maturity date and whether it is secured or unsecured. If any additional financing facilities have been entered into or are proposed to be entered into after quarter end, include a note providing details of those facilities as well.		
N/A		

8. Estimated cash available for future operating activities	\$A'000
8.1 Net cash from / (used in) operating activities (item 1.9)	(1,684)
8.2 Cash and cash equivalents at quarter end (item 4.6)	5,382
8.3 Unused finance facilities available at quarter end (item 7.5)	-
8.4 Total available funding (item 8.2 + item 8.3)	5,382
8.5 Estimated quarters of funding available (item 8.4 divided by item 8.1)	3
<i>Note: if the entity has reported positive net operating cash flows in item 1.9, answer item 8.5 as "N/A". Otherwise, a figure for the estimated quarters of funding available must be included in item 8.5.</i>	
8.6 If item 8.5 is less than 2 quarters, please provide answers to the following questions:	
8.6.1 Does the entity expect that it will continue to have the current level of net operating cash flows for the time being and, if not, why not?	
Answer: N/A	
8.6.2 Has the entity taken any steps, or does it propose to take any steps, to raise further cash to fund its operations and, if so, what are those steps and how likely does it believe that they will be successful?	
Answer: N/A	
8.6.3 Does the entity expect to be able to continue its operations and to meet its business objectives and, if so, on what basis?	
Answer: N/A	
<i>Note: where item 8.5 is less than 2 quarters, all of questions 8.6.1, 8.6.2 and 8.6.3 above must be answered.</i>	

Compliance statement

- 1 This statement has been prepared in accordance with accounting standards and policies which comply with Listing Rule 19.11A.
- 2 This statement gives a true and fair view of the matters disclosed.

Date: 29 October 2021

Authorised by: the Board
(Name of body or officer authorising release – see note 4)

Notes

1. This quarterly cash flow report and the accompanying activity report provide a basis for informing the market about the entity's activities for the past quarter, how they have been financed and the effect this has had on its cash position. An entity that wishes to disclose additional information over and above the minimum required under the Listing Rules is encouraged to do so.
2. If this quarterly cash flow report has been prepared in accordance with Australian Accounting Standards, the definitions in, and provisions of, *AASB 107: Statement of Cash Flows* apply to this report. If this quarterly cash flow report has been prepared in accordance with other accounting standards agreed by ASX pursuant to Listing Rule 19.11A, the corresponding equivalent standard applies to this report.
3. Dividends received may be classified either as cash flows from operating activities or cash flows from investing activities, depending on the accounting policy of the entity.
4. If this report has been authorised for release to the market by your board of directors, you can insert here: "By the board". If it has been authorised for release to the market by a committee of your board of directors, you can insert here: "By the [name of board committee – eg Audit and Risk Committee]". If it has been authorised for release to the market by a disclosure committee, you can insert here: "By the Disclosure Committee".
5. If this report has been authorised for release to the market by your board of directors and you wish to hold yourself out as complying with recommendation 4.2 of the ASX Corporate Governance Council's *Corporate Governance Principles and Recommendations*, the board should have received a declaration from its CEO and CFO that, in their opinion, the financial records of the entity have been properly maintained, that this report complies with the appropriate accounting standards and gives a true and fair view of the cash flows of the entity, and that their opinion has been formed on the basis of a sound system of risk management and internal control which is operating effectively.