U.S. Army Research Lab Selects 3D Systems to Develop World’s Largest, Fastest Metal Powder 3D Printer

- United States government invests $15 million towards the development of the next generation of metal 3D printing technology – advancing U.S. competitiveness and national security

ROCK HILL, South Carolina, July 11, 2019 – 3D Systems (NYSE: DDD) today announced it has been awarded a $15 million contract by the Combat Capabilities Development Command Army Research Laboratory, also known as ARL, to create the world’s largest, fastest, most precise metal 3D printer. This printer will revolutionize key supply chains associated with long-range munitions, next-generation combat vehicles, helicopters, and air and missile defense capabilities. 3D Systems and the National Center for Manufacturing Sciences (NCMS) were awarded funding to create this revolutionary printer and will partner with ARL and the Advanced Manufacturing, Materials, and Processes (AMMP) Program to advance the leadership and innovation of the world’s strongest military.

According to the U.S. Army Additive Manufacturing Implementation Plan, the Army has been using additive manufacturing (AM) for two decades to refurbish worn parts and create custom tools. Once developed, the Army will leverage its manufacturing experience by placing the new large-scale systems in its depots and labs. Subsequently, 3D Systems and its partners plan to make the new 3D printer technology available to leading aerospace and defense suppliers for development of futuristic Army platforms.
In each of these cases, the planned printer’s unprecedented large scale and precision will enable more efficient design and production of long-term durable parts with reduced material usage, as well as faster time to market with parts going into the field. The printer’s build envelope is planned to be 1000mm x 1000mm x 600mm, with ability to build minimum wall thickness of 100µm and layer thickness of 30µm. This is a significant increase over current large-scale metal 3D printers with a build envelope of 500mm x 500mm x 500mm.

“The Army is increasing readiness by strengthening its relationships and interoperability with business partners, like 3D Systems, who advance warfighter requirements at the best value to the taxpayer,” said Dr. Joseph South, ARL’s program manager for Science of Additive Manufacturing for Next Generation Munitions. “Up until now, powder bed laser 3D printers have been too small, too slow, and too imprecise to produce major ground combat subsystems at scale. Our goal is to tackle this issue head-on with the support of allies and partners who aid the Army in executing security cooperation activities in support of common national interests, and who help enable new capabilities for critical national security supply chains.”

In addition to bringing a new metal AM solution to the Army, 3D Systems will also evaluate the feasibility of integrating the new technologies and processes into its existing portfolio of 3D printer technologies.

“Through this project, we’re looking forward to delivering a working manufacturing system like no other,” said Chuck Hull, co-founder and chief technology officer, 3D Systems. “From the early years of 3D Systems, our desire to innovate has been fueled by our customers’ drive to be leaders in their respective industries. The solutions we develop have complemented many manufacturers’ processes to help maintain their competitive advantage. ARL has already realized the power of AM to transform its operations. We look forward to collaborating with them to scale and expand these capabilities by delivering first-to-market processes, materials, and technologies.”

“What 3D Systems is doing currently is nothing short of pioneering,” said Lisa Strama, president and CEO, NCMS. “As the capstone project of the AMMP Program, it will lead to critical breakthroughs for our members and partners, enhancing performance and speeding
innovations to market. This technology will be not only transformational for supporting our warfighter, but also across the supply chain.”

Co-founded by industry pioneer, Chuck Hull, who patented stereolithography in 1986, 3D Systems has a broad portfolio of polymer and metal as well as 3D printing tools. Recently, the company expanded its platform-centric approach by announcing the DMP Factory 500, DMP Factory 350 and DMP Flex 350 in collaboration with GF Machining Solutions. These solutions are some of the first to combine scalable additive and subtractive technologies.

**Forward-Looking Statements**

Certain statements made in this release that are not statements of historical or current facts are forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Forward-looking statements involve known and unknown risks, uncertainties and other factors that may cause the actual results, performance or achievements of the company to be materially different from historical results or from any future results or projections expressed or implied by such forward-looking statements. In many cases, forward-looking statements can be identified by terms such as "believes," "belief," "expects," "may," "will," "estimates," "intends," "anticipates" or "plans" or the negative of these terms or other comparable terminology. Forward-looking statements are based upon management’s beliefs, assumptions, and current expectations and may include comments as to the company’s beliefs and expectations as to future events and trends affecting its business and are necessarily subject to uncertainties, many of which are outside the control of the company. The factors described under the headings "Forward-Looking Statements" and "Risk Factors" in the company’s periodic filings with the Securities and Exchange Commission, as well as other factors, could cause actual results to differ materially from those reflected or predicted in forward-looking statements. Although management believes that the expectations reflected in the forward-looking statements are reasonable, forward-looking statements are not, and should not be relied upon as a guarantee of future performance or results, nor will they necessarily prove to be accurate indications of the times at which such performance or results will be achieved. The forward-looking statements included are made only as of the date of the statement. 3D Systems undertakes no obligation to update or review any forward-looking statements made by management or on its behalf, whether as a result of future developments, subsequent events or circumstances or otherwise.
About 3D Systems
More than 30 years ago, 3D Systems brought the innovation of 3D printing to the manufacturing industry. Today, as the leading AM solutions company, it empowers manufacturers to create products and business models never before possible through transformed workflows. This is achieved with the Company’s best-of-breed digital manufacturing ecosystem - comprised of plastic and metal 3D printers, print materials, on-demand manufacturing services and a portfolio of end-to-end manufacturing software. Each solution is powered by the expertise of the company’s application engineers who collaborate with customers to transform manufacturing environments. 3D Systems’ solutions address a variety of advanced applications for prototyping through production in markets such as aerospace, automotive, medical, dental and consumer goods. More information on the company is available at www.3dsystems.com.

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