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**FOR IMMEDIATE RELEASE**

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**Arconic, Airbus to Advance 3D Printing for Aerospace  
under Multi-Year Cooperative Research Agreement**

*To Produce, Qualify Large-Scale 3D Printed Airbus Airframe Components*

- Will jointly develop customized processes and parameters to make structural, 3D printed metal parts up to approximately 1 meter (3 feet) in length
- Combines Arconic's expertise in metal additive manufacturing and metallurgy with Airbus's know-how in final aircraft part design and qualification
- Builds on Arconic's comprehensive capabilities to manufacture 3D printed aircraft components using a variety of metals-based additive technologies

**NEW YORK and FRANKFURT, GERMANY, November 15, 2017** – Arconic (NYSE: ARNC) today announced a multi-year cooperative research agreement with Airbus to advance metal 3D printing for aircraft manufacturing. Together, the companies will develop customized processes and parameters to produce and qualify large, structural 3D printed components, such as pylon spars and rib structures, up to approximately 1 meter (3 feet) in length. The deal combines Arconic's expertise in metal additive manufacturing and metallurgy with Airbus's design and qualification capabilities, building on its experience with regulatory agencies for certification.

"This agreement combines the expertise of two of the world's top aerospace additive manufacturing companies to push the boundaries of 3D printing for aircraft production," said Eric Roegner, Executive Vice President and Group President, Arconic Engineered Products and Solutions and Arconic Defense. "Additive manufacturing promises a world where lighter, more complex aerospace parts are produced cheaper and faster. We're joining forces to make that potential a reality in a bigger way than ever before."

Under this agreement announced at the [Formnext](#) additive and advanced manufacturing conference in Frankfurt, Germany, Arconic will use electron beam high deposition rate technology to 3D print parts. This technology is ideally suited to produce larger aerospace components

because it prints them up to one hundred times faster than technologies used for smaller, more intricate parts.

In addition, Arconic will demonstrate the benefits of its proprietary Ampliforge™ process, which combines traditional and additive manufacturing. The Ampliforge™ process treats a near complete 3D printed part using an advanced manufacturing process, such as forging, which enhances the properties of 3D printed parts – increasing toughness, fatigue and strength versus parts made solely by additive manufacturing – and reduces material input and production lead times.

Arconic will draw on additive and advanced manufacturing capabilities at its facilities in Cleveland, Ohio and at the Arconic Technology Center outside Pittsburgh, Pennsylvania.

### **Arconic, Airbus and 3D Printing**

Arconic’s comprehensive capabilities – from materials science and additive manufacturing expertise to qualification and supply chain management experience – are helping grow our partnership with Airbus.

Last September, Airbus announced a 3D printing breakthrough involving a smaller component equipping the airframe – a 3D printed titanium bracket installed on a series production Airbus commercial aircraft, the A350 XWB. This achievement is paving the way for Airbus to design 3D printed parts in the future that are even more complex and lighter weight. Arconic is producing these titanium brackets using laser powder bed technologies at its additive manufacturing facility in Austin, Texas.

Arconic announced three [agreements](#) with Airbus last year. Under those deals, Arconic agreed to 3D print titanium and nickel airframe components, such as fuselage and engine pylon components, made using laser and electron beam powder bed processes. Those agreements established Arconic as an innovation partner to Airbus in the fast-growing metal 3D printing space.

### **About Arconic**

Arconic (NYSE: ARNC) creates breakthrough products that shape industries. Working in close partnership with our customers, we solve complex engineering challenges to transform the way we fly, drive, build and power. Through the ingenuity of our people and cutting-edge advanced manufacturing techniques, we deliver these products at a quality and efficiency that ensure customer success and shareholder value. For more information: [www.arconic.com](http://www.arconic.com). Follow @arconic: [Twitter](#), [Instagram](#), [Facebook](#), [LinkedIn](#) and [YouTube](#).

### **Dissemination of Company Information**

Arconic intends to make future announcements regarding Company developments and financial performance through its website on [www.arconic.com](http://www.arconic.com).

### **Forward-Looking Statements**

This release contains statements that relate to future events and expectations and as such

constitute forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Forward-looking statements include those containing such words as “anticipates,” “estimates,” “expects,” “may,” “plans,” “projects,” “should,” “will,” “would,” or other words of similar meaning. All statements that reflect Arconic’s expectations, assumptions or projections about the future, other than statements of historical fact, are forward-looking statements, including, without limitation, forecasts and expectations relating to end markets; statements about Arconic’s strategies, outlook, business and financial prospects; and expectations relating to additive manufacturing and 3D printing. Forward-looking statements are not guarantees of future performance and are subject to risks, uncertainties, and changes in circumstances that are difficult to predict. Although Arconic believes that the expectations reflected in any forward-looking statements are based on reasonable assumptions, it can give no assurance that these expectations will be attained and it is possible that actual results may differ materially from those indicated by these forward-looking statements due to a variety of risks and uncertainties. Such risks and uncertainties include, but are not limited to: (a) deterioration in global economic and financial market conditions generally; (b) unfavorable changes in the markets served by Arconic, including the aerospace market; and (c) the other risk factors discussed in Arconic’s Form 10-K for the year ended December 31, 2016, Arconic’s Form 10-Q for the quarter ended June 30, 2017 and other reports filed with the U.S. Securities and Exchange Commission. Arconic disclaims any obligation to update publicly any forward-looking statements, whether in response to new information, future events or otherwise, except as required by applicable law. Market projections are subject to the risks discussed above and other risks in the market.