SIEMENS

Press

Munich, July 4, 2016

World-record electric motor makes first flight

- Technical milestone: maiden flight of an electric aircraft with a 260-kilowatt power output
- Siemens motor powers Extra 330LE aerobatic airplane in near silence
- Technology to be integrated into development of hybrid-electric aircraft in cooperation with Airbus

Siemens researchers have developed a new type of electric motor that, with a weight of just 50 kilograms, delivers a continuous output of about 260 kilowatts – five times more than comparable drive systems. This record-setting propulsion system successfully completed its first public flight today at Schwarze Heide Airport near Dinslaken, Germany, where it – almost silently – powered an Extra 330LE aerobatic airplane. The new drive system had already made its maiden flight on June 24th 2016. This advance means that hybrid-electric aircraft with four or more seats will now be possible.

"This day will change aviation," said Frank Anton, head of eAircraft at Siemens' central research unit Corporate Technology. "This is the first time that an electric aircraft in the quarter-megawatt performance class has flown." The Extra 330LE, which weighs nearly 1,000 kilograms, serves as a flying test bed for the new propulsion system. As an aerobatic airplane, it's particularly well suited for taking the components to their limits, testing them and enhancing their design.

In addition, the company will be contributing this technology to the cooperative project that Siemens and Airbus agreed to in April 2016 for driving the development of electrically powered flight. Electric drives are scalable, and Siemens and Airbus will be using the record-setting motor as a basis for developing regional airliners powered by hybrid-electric propulsion systems. "By 2030, we expect to see initial

Siemens AG Communications Head: Clarissa Haller Wittelsbacherplatz 2 80333 Munich Germany Siemens AG Press release

aircraft with up to 100 passengers and a range of around 1,000 kilometers," explained Anton.

"The first flight of our propulsion system is a milestone on the road to electrification of aviation," said Siemens Chief Technology Officer Siegfried Russwurm. "To continue this journey successfully, we need disruptive ideas and the courage to take risks. That's why the development of electric propulsion systems for aircraft is also the first project for our new start-up organization, next47." Siemens is determined to establish hybrid-electric propulsion systems for aircraft as a future area of business.

Germany's Aeronautics Research Program (LuFo) supported development of this motor. The Extra 330LE was created in cooperation with Siemens, Extra Aircraft, MT-Propeller and Pipistrel (battery).

The press release and further material are available under www.siemens.com/press/electric-motor-plane

Contact for journalists

Florian Martini

Tel.: +49 89 636 33446; e-mail: florian.martini@siemens.com

Follow us on Twitter: www.twitter.com/siemens press

Siemens AG (Berlin and Munich) is a global technology powerhouse that has stood for engineering excellence, innovation, quality, reliability and internationality for more than 165 years. The company is active in more than 200 countries, focusing on the areas of electrification, automation and digitalization. One of the world's largest producers of energy-efficient, resource-saving technologies, Siemens is No. 1 in offshore wind turbine construction, a leading supplier of gas and steam turbines for power generation, a major provider of power transmission solutions and a pioneer in infrastructure solutions as well as automation, drive and software solutions for industry. The company is also a leading provider of medical imaging equipment – such as computed tomography and magnetic resonance imaging systems – and a leader in laboratory diagnostics as well as clinical IT. In fiscal 2015, which ended on September 30, 2015, Siemens generated revenue of €75.6 billion and net income of €7.4 billion. At the end of September 2015, the company had around 348,000 employees worldwide. Further information is available on the Internet at www.siemens.com.

Reference number: PR2016070333COEN