

## Siemens showcases electric aviation prototype technology for first time in the U.S.

- **Siemens designs and develops record-breaking electric propulsion systems for aircraft using digital twin technology**

Today at its Innovation Day in Chicago, Siemens highlighted a research and development project: its prototype electric propulsion technology for manned and unmanned aircraft in the commercial aviation, general aviation, defense and urban mobility sectors for the first time in the U.S. The “eAircraft” technologies electrify an aircraft’s propulsion system which results in less noise, fewer emissions and lower fuel consumption.

Siemens designs and develops the electric propulsion systems through a fully digitalized software process with its PLM business. Using data and software technology, Siemens creates a digital twin of both the individual components and the complete system to simulate, validate and optimize the operations before the propulsion system takes flight. Utilizing digitalization reduces development costs and increases the speed of development.

““Electric propulsion is one of the transformative technologies that will help the industry meet the goals of reduced fuel, emissions and noise. Given Siemens expertise in electrical systems, this is a research area that we feel compelled to explore through our own research as well as industry partnerships. The prototypes underway and our technological successes thus far are helping explore what the future of the electric aviation landscape could look like,” said Teri Hamlin, VP of Electric Propulsion, Siemens Government Technologies. “By accomplishing testing on our systems on select flying testbeds in the lower power classes, we are gaining valuable experience and knowledge that accelerates and validates our other developments in hybrid-electric propulsion systems in the high power-classes. Electric and Hybrid-electric propulsion systems for aircraft, regardless of aviation sector – commercial, general, defense and urban mobility – promise to be more sustainable, economical and will result in a quieter airspace

that could allow longer operating hours for airports.”

Further testing and verification of the company’s technology will take place in the U.S. in Waco, Texas at the Texas State Technical College Airfield. The facility will become one of Siemens test sites, home to the eFusion aircraft, as a flying testbed featuring the Siemens 55kw electric propulsion unit. The Texas facility will be key in data collection on new electric propulsion systems, enabling safety standards and certification efforts for the ground breaking systems for the aerospace market.

[Globally](#), Siemens electric motor technology has powered aircrafts to set two speed records, achieve the world’s first aero tow by an electric plane, and set a new world climb record with an altitude of 3,000 meters in four minutes and 22 seconds. Their motors, the SP260D and SP200D, are leading technology with respect to their power-to-weight ratio and torque-to-weight-ratio, respectively. The SP200D, a 200kW motor, will power the “CityAirbus” demonstrator, a vertical take-off and landing (VTOL) vehicle for urban mobility designed by Airbus. The first flight is expected this year. Siemens also recently announced it will collaborate with Airbus and Rolls-Royce to further develop innovations in the field of hybrid electric propulsion.

### ***About Siemens Innovation Day USA 2018***

Siemens Innovation Day USA at the Digital Manufacturing and Design Innovation Institute (DMDII) at UI Labs in Chicago brings together technology experts to showcase how digitalization is enabling companies and organizations to do things better than ever before. From AI technology that will transform farming to software that can transport people virtually to remote oil fields, the annual event is a live look at the technologies that drive business value in a post-digital world. For more information, or to attend virtually, click [here](#) and follow the conversation using #SiemensInnovates.

For more information on Siemens electric flight technology, please visit:

[www.siemens.com/press/electric-aircraft](http://www.siemens.com/press/electric-aircraft).

This press release, photos and additional material are available at <http://news.usa.siemens.com>.

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