Eaton And NTU Singapore Join Hands To Develop eVTOL Solutions

Chen Chuanren February 21, 2024

The agreement between Eaton and NTU aims to integrate latter's academic research and innovation with the former's industry capabilities.

Credit: Eaton Corp.

SINGAPORE—Power management company Eaton Aerospace and the Nanyang Technological University (NTU) in Singapore have signed a three-year research collaboration agreement to develop electric vertical-takeoff-and-landing (eVTOL) solutions. The agreement was inked at the Singapore Airshow on Feb. 20.

The agreement aims to integrate NTU's academic research and innovation with Eaton's industry capabilities.

"With our aim to create societal impact through interdisciplinary education and research combined with Eaton's extensive industry experience in the aerospace and electrical business, we are well placed to provide a strong foundation for this partnership," said Lam Khin Yong, a professor of engineering and NTU's vice president of industry. "Together, we look forward to optimizing eVTOLs for use and making meaningful contributions to this growing ecosystem."

Eaton tells Aviation Week that the company has been heavily investing in the developing trend of electrification and digitalization. It has also developed a series of aerospace products including high-voltage power distribution units, DC/AC motor drives and electrical motors, solid-state power controllers, and thermal management systems for eVTOLs.

A recent Eaton project on eVTOLs is providing the electrical power distribution system for Airbus' CityAirbus NextGen aircraft.

"The power distribution system ensures that the eVTOL is flying safely by compensating for any reduction of battery performance in flight," said Desmond Goh, Eaton Aerospace's managing director for the Asia-Pacific. "Leveraging the company's extensive experience in electrification for the aviation industry, Eaton is designing, analyzing and manufacturing the power distribution unit to be fully integrated within the electrical propulsion system of the Airbus prototype."

SINGAPORE AIRSHOW 2024 DAY 2 EATON AEROSPACE ELECTRIC VERTICAL-TAKEOFF-AND-LANDING (EVTOL)