



Professor James Wang, director of Nanyang Technological University's eVTOL aircraft research and innovation centre, and his team with a prototype of the 8m aircraft. There is also a 3m version. ST PHOTO: NG SOR LUAN

NTU-built electric aircraft completes first phase of flight tests in Germany

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An electric aircraft designed, engineered and built in Singapore has completed its first phase of flight tests in Cochstedt, Germany.

The electric vertical take-off and landing (eVTOL) aircraft prototypes were built by a team of over 20 students and alumni, as well as professor James Wang from Nanyang Technological University.

The 8m-wingspan variant and a 3m version are research technology demonstrators and not currently designed to carry passengers, the university said on Aug 25.

During the tests spanning 2½ weeks in July, the 3m prototype gained close to two hours worth of flight mileage over 17 flights, while the 8m prototype flew for a combined duration of 43 minutes across 20 flights.



Prototypes of the eVTOL aircraft, which are research technology demonstrators, were tested for 2½ weeks in July. PHOTO: NTU SINGAPORE

The larger variant reached an altitude of 92m, while the smaller one reached 60m and a speed of

around 120kmh.

The tests were conducted in a flight area measuring 1.2km by

2.4km at the German Aerospace Centre.

At the end of the testing period, the 8m prototype encountered a hard landing and could not be repaired in time for the team to evaluate its forward propulsion.

The team will continue running tests to improve the aircraft's autonomous flight capabilities and ranges, said Wang, director of the university's eVTOL aircraft research and innovation centre.

Wang said the team is also looking into using hydrogen to power the aircraft and enhance their battery capacity.

The goal is to create an aircraft that can be scaled to different sizes, including a variant with a 14m wingspan that can ferry five people, and a 3m version for cargo, he added.

To start commercial operation in Singapore, Wang said the team would need to secure \$975 million from investors, recruit the right talent and gain enough support from the Government.

It has received \$25 million in funding from the Government so far.

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