

EVTOL

Singapore's homegrown eVTOL completes flight testing

By [Alfred Chua](#) | 25 August 2026



The 8m-wingspan eVTOL prototype was tested at a DLR site in Germany, accumulating a total of 43min of flight time
Source: NTU Singapore

Trials took place in Germany in July, capping off three years of research and development.

Singapore's Nanyang Technological University (NTU) has completed flight testing of the country's homegrown electric vertical take-off and landing (eVTOL) aircraft programme.

Two demonstrators – one with an 8m (26ft) wingspan and another with a 3m wingspan – took part in a month-long flight test in July at German aerospace research body DLR's flight-test centre in Cochstedt.

In total, the two prototypes operated close to 40 test flights, with the larger variant accumulating 43min in flight time and the smaller variant operating for 108min.

The larger variant reached up to 92m in altitude while the smaller variant flew up to 60m, at speeds of up to 65kt (120km/h) during forward flight.

The prototypes were piloted remotely, with each aircraft requiring two controllers: one outdoors to commence the eVTOL's hover flight via line of sight, and a second to take over remotely once the eVTOL transitioned to fixed-wing flight.

Each demonstrator has eight wing-mounted rotors for vertical flight and a larger pusher-propeller for cruise.

The test flights cap off a three-year research and development programme, spearheaded by NTU's Professor James Wang – an aerospace industry veteran – which has received around S\$25 million (\$19.7 million) in government funding.

Wang's 30-strong team designed and engineered the airframe and electric motor systems, and developed the demonstrator's flight-control systems.

The project has also received support from other aerospace firms, including Eaton Aerospace, European avionics firm Embention, as well as Singapore-based Flare Dynamics.

The larger demonstrator was formally unveiled at this year's Singapore air show, and was later shipped to Germany for flight testing.

Commercialisation of the eVTOL remains a long shot, says Wang, who is a former Leonardo Helicopters research and development chief. When – and how – it happens will depend on available funding, as well as manpower, he notes.

For now, Wang's team – mostly comprising NTU under- and post-graduate students – is continuing its work to fine-tune the demonstrators.

Wang tells FlightGlobal: "There are many other things that we're thinking of: for example, we [want] to demonstrate more autonomous flying... because right now, it's a pilot flying manually. We have done some of that, but we need to do more."

Work is also under way to look at extending the range of the eVTOL up to 162nm (300km), and to explore the possibilities of "converting this to a hybrid-electric system" through hydrogen fuel cells.

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