



LILIUM BEGINS CONSTRUCTION OF CERTIFICATION TEST FACILITY FOR THE LILIUM JET WITH SEGULA TECHNOLOGIES

News / Business aviation, Events / Festivals, Manufacturer



Lilium has started construction of an advanced test facility for integration and certification testing of the Lilium Jet. Designed in partnership with global engineering group SEGULA Technologies and located at Lilium's headquarters near Munich, Germany, the state-of-the-art facility is due to become operational in late Summer 2024. The test site will house a complete, fully integrated aircraft and be used for testing of the Lilium Jet's avionics, flight controls, propulsion system and electrical power system. As part of the Lilium Jet's certification campaign, the facility will be used to simulate flights and verify the performance of the aircraft through multiple flight profiles.

Alongside the building of the first Lilium Jet, which began at the end of 2023, the construction of the test site represents an important next step on Lilium's path towards first piloted flight, targeted for the end of this year, and type-certification of the Lilium Jet. As an EASA Design Organization Approval holder, Lilium is qualified to undertake conformity of test articles and testing to demonstrate compliance against the applicable certification basis. The test facility will enable

Lilium to plan and perform such tasks independently of EASA with an agreed level of involvement.

Covering a total area of 26,000 sq. feet (2400 m²), the test facility will comprise an aircraft mounting frame for aircraft loads and moments, an airflow management system to enable representative flight conditions, and charging and cooling equipment for the aircraft's batteries. Aerodynamic testing will be supported by a powerful 1.2-megawatt blower, supplied by international engineering company VIRO, that can simulate cross- and tailwinds of up to 40 mph (65 km/h).

For its cutting-edge expertise in test rigs, calculations, simulations, and for its comprehensive multidisciplinary approach, SEGULA Technologies was selected by Lilium as partner for the design of the test facility. The project team, comprising approximately thirty experts across several sites (including Germany's Cologne and Munich, and France's Vitrolles and Lyon offices), brings specialized skills in mechanical design, calculation, and fluid simulations.

Stephen Vellacott, Chief Technology Officer of Lilium, commented: "The test facility will be a cornerstone of the Lilium Jet certification program, allowing us to test multiple flight missions as well as failure scenarios in a controlled environment on the ground. Alongside the flight demonstration, ground-based testing will play a critical role on the path towards certification of the Lilium Jet. We are pleased to have such an experienced and reliable partner like SEGULA Technologies for the test rig design and value especially the team's multidisciplinary approach."

Ulrich Weide, Head of Business Development in the Aerospace Department at SEGULA Technologies, said: "As engineers, it's a great experience to be involved in such a project firstly, because it represents a further step in decarbonising the aviation industry. Secondly, we've put together a transnational team of passionate experts, which is very stimulating and fosters a rich learning environment. Together, we're not just building aircraft; we're pioneering the future of flight."



ARTICLE LINK:

<https://ids.50skyshades.com/news/business-aviation/lilium-begins-construction-of-certification-test-facility-for-the-lilium-jet-with-segula-technologies>