

Where We're Going, We Don't Need Roads!

Matthew Jaster, Senior Editor

Why not flying cars? We talk on video screens. We disappear into virtual 3D worlds thanks to Virtual Reality (VR). We have robots working in restaurants. Flying cars are pretty much the last thing from *The Jetsons* cartoon missing in 2021.

They might be coming sooner than you think.

I've spoken with several power transmission component suppliers 'off the record' regarding their work in this area in the next 5-10 years. Certifications in Europe are taking place as I write this. It's quite feasible that a 45-minute commute to the airport via the highway could be a 10-minute cruise above suburbia in the coming years.

Here's a sample of some of the vehicles getting closer and closer to commercial viability in Europe:

PAL-V Liberty

The Personal Air and Land Vehicle (PAL-V) company was founded in the Netherlands in 2008.

After being the first flying car to get road permission for Europe, PAL-V is now also the first to complete the full certification basis with the European Union Aviation Safety Agency (EASA). Based on PAL-V's 10 years of test results, EASA specialist teams finalized the requirements for the PAL-V Liberty.



Photo courtesy of PAL-V

"Getting a flying car to the market is hard. It takes at least 10 years," said Robert Dingemans, PAL-V's CEO: "Although we are experienced entrepreneurs, we learned that in aviation everything is exponentially stricter. Next to the aircraft, all aspects of the organization, including suppliers and maintenance parties must be certified."



Photo courtesy of AeroMobil

In 2009, PAL-V agreed with EASA to use the certification specifications for small rotorcraft, CS-27, as a starting point for the development of the certification basis. PAL-V worked together with EASA to amend the complete list of over 1,500 criteria to make it applicable.

"Safety is key in developing the Liberty," said Mike Stekelenburg, CTO. "We are privileged to work with top experts of EASA. Their high safety standards also allow the Liberty to be used professionally. From the start, we built the Liberty to comply with existing regulations. This strategy provides the fastest route to market."

www.pal-v.com

AeroMobil

The AeroMobil Company from Slovakia is the developer of a new ultra-high-end vehicle equally at home on the road or in the sky. The company recently announced details of the completed phase of its AeroMobil flight testing. When commercially introduced in 2023, The AeroMobil will have undergone over a decade of design and development, including flight testing of three functional prototypes and over 300,000 hours of engineering on the latest version.

The flight test program, which began in September 2020, is part of the EASA CS23 requirements governing all critical aspects of flight. The company started the overall EASA certification process for The AeroMobil during 2019. Through the flight test program, the AeroMobil has successfully met several key EASA CS23 requirements governing airworthiness, including the flight performance in terms of top and stall speeds as well as the impressive ability to take off within 1,300 feet and achieve a rate of climb of over 1,200 feet per minute. **PTE**

www.aeromobil.com