

Renault Zep'lin: solar-powered racing airship concept

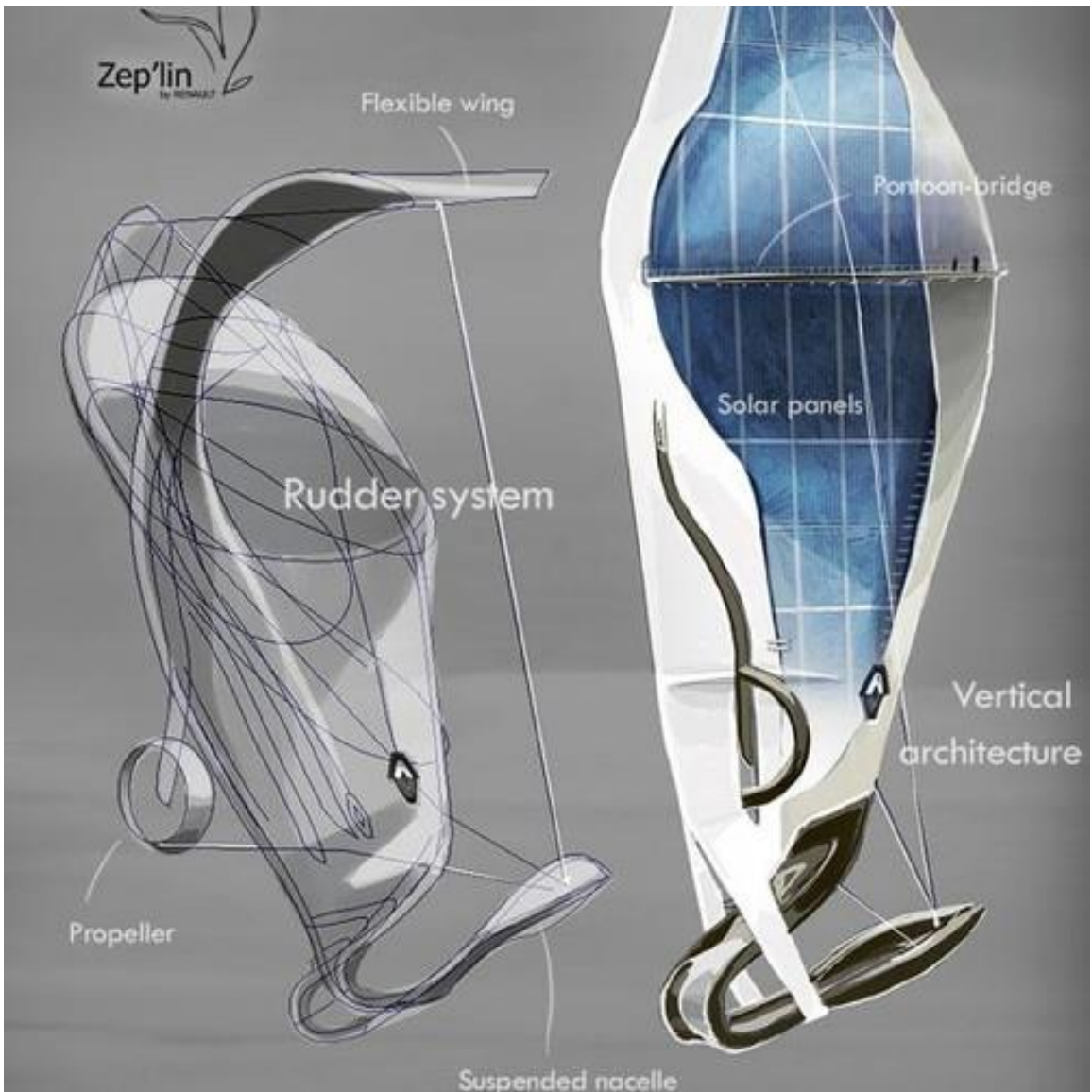
Peter Lobner, 5 August 2019

Designed for Renault by German industrial designer Damien Grossemy in 2009, the “Zep'lin” is a concept for a solar electric-powered, highly-maneuverable airship that could engage in an around-the-world race intended to promote new technologies for electric vehicles. The Zep'lin features a vertical architecture that gives the airship a small footprint on the ground and enables it to land almost anywhere without the need of infrastructure.



*Rendering of the start of a Zep'lin around-the-world race in London.
Source. Inhabit.com*

The crew is housed in a long, slender gondola (“nacelle”) suspended under the 8,000 m³ (282,500 ft³) helium gas envelope. The airship generates power from solar panels on the gas envelope. With its clever rudder system that moves a flexible wing, Zep'lin can tilt toward the sun for optimum solar energy generation. On-board lithium-ion batteries store extra energy for use later. Propulsion is provided by a single, electric motor-driven, shrouded propeller. The Zep'lin will appear to move like a sailboat in the sky.



Zep'lin general arrangement. Source: Inhabit.com



The crew gondola ("nacelle") suspended under the helium gas envelope.



Renderings of Zep'lines racing. Source: Inhabit.com

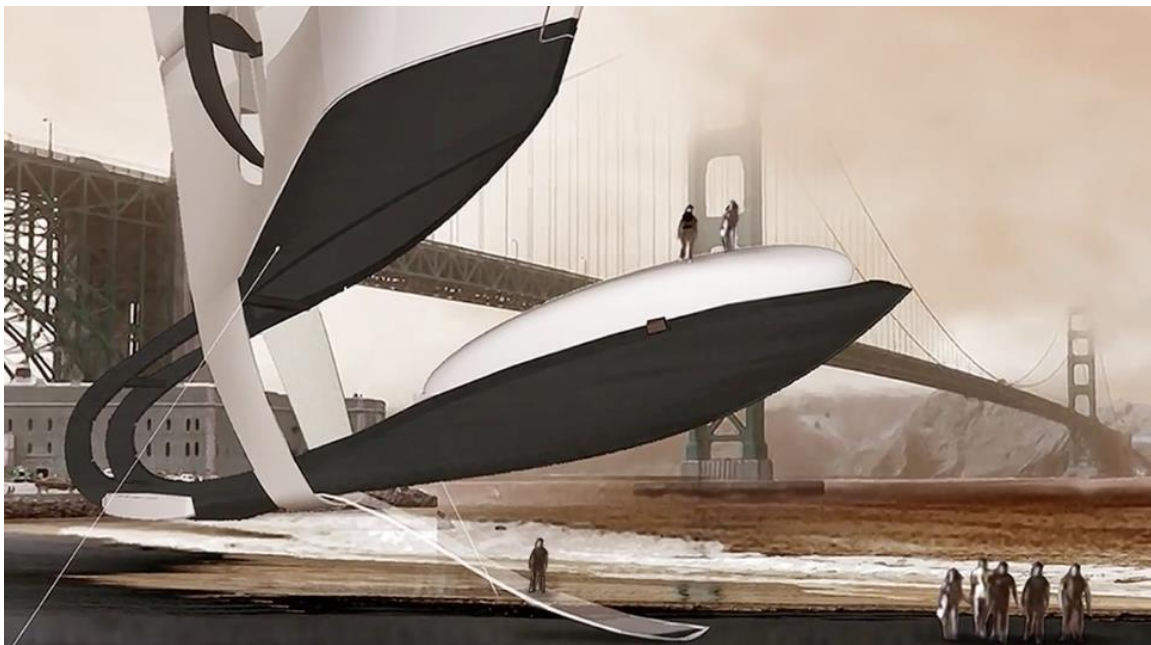


You can watch a short 2009 video, “The Ultimate Zeppelin by Renault,” here:

<https://www.youtube.com/watch?v=5JJ6C0Sp76c>

You’ll find more details on the Zep’lin airship on the Inhabit.com website at the following link. This was the source of most of the graphics in this section.

<https://inhabitat.com/flying-sailboat-soars-through-the-sky-on-solar-power/>



*Artist's concept of a Zep'lin on the ground in San Francisco.
Source: screenshot from YouTube video.*