

Aerolabe - solar-powered ornithopter airship

Peter Lobner, updated 18 March 2022

The Aerolabe was a 2010 concept airship designed by French painter and sculptor Gaspard Schlumberger, who believes that solar energy has the potential to “green” the airspace dominated by gas-guzzling aircraft. His cigar-shaped airship will have solar panels on the top of gas envelope and it will be propelled by electrically driven ornithopter (bird-like flapping) wings and tail, supplemented by propellers.

You can watch a short 2010 video on Aerolabe, entitled “Designer plans air travel revolution with Aerolabe,” at the following link:

<https://www.youtube.com/watch?v=c9FFRzZoull>

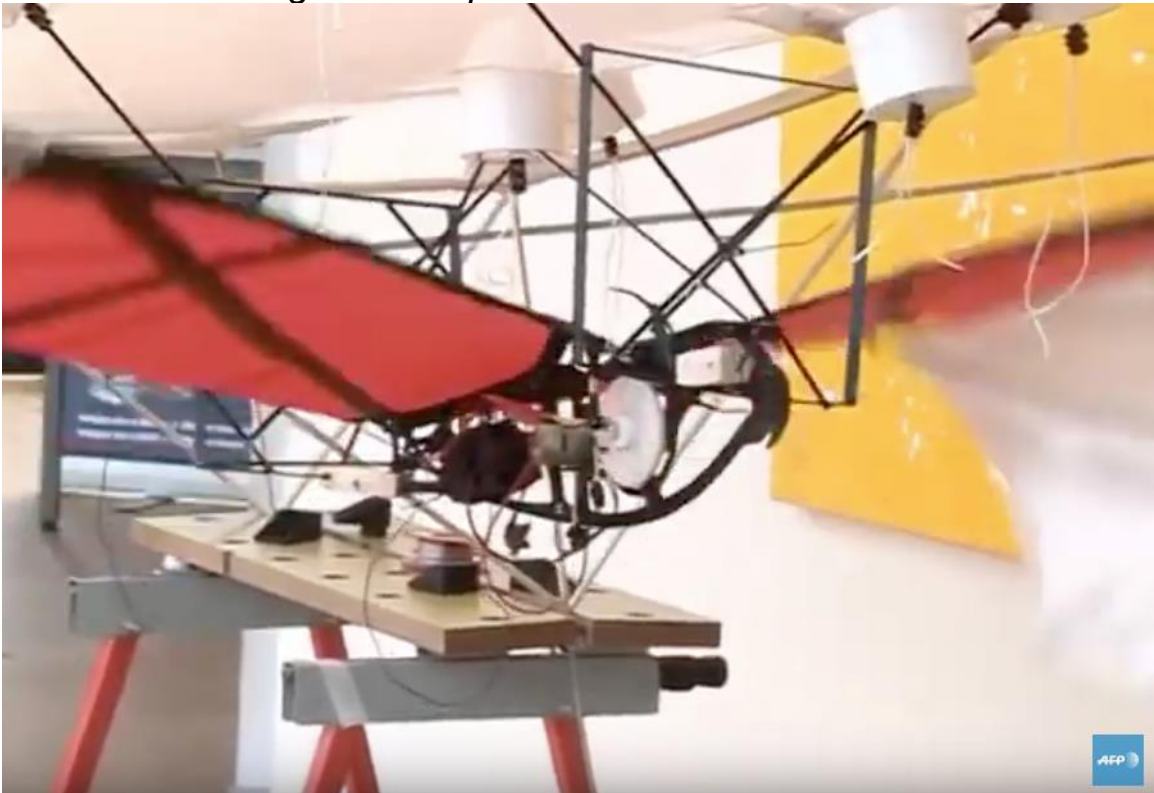
The video shows tests of a sub-scale demonstrator and includes animations that should give you an understanding of how the airship is intended to fly.



1/12th scale model of the Aerolabe gas envelope before attaching the wing and tail. Source: screenshots from video.



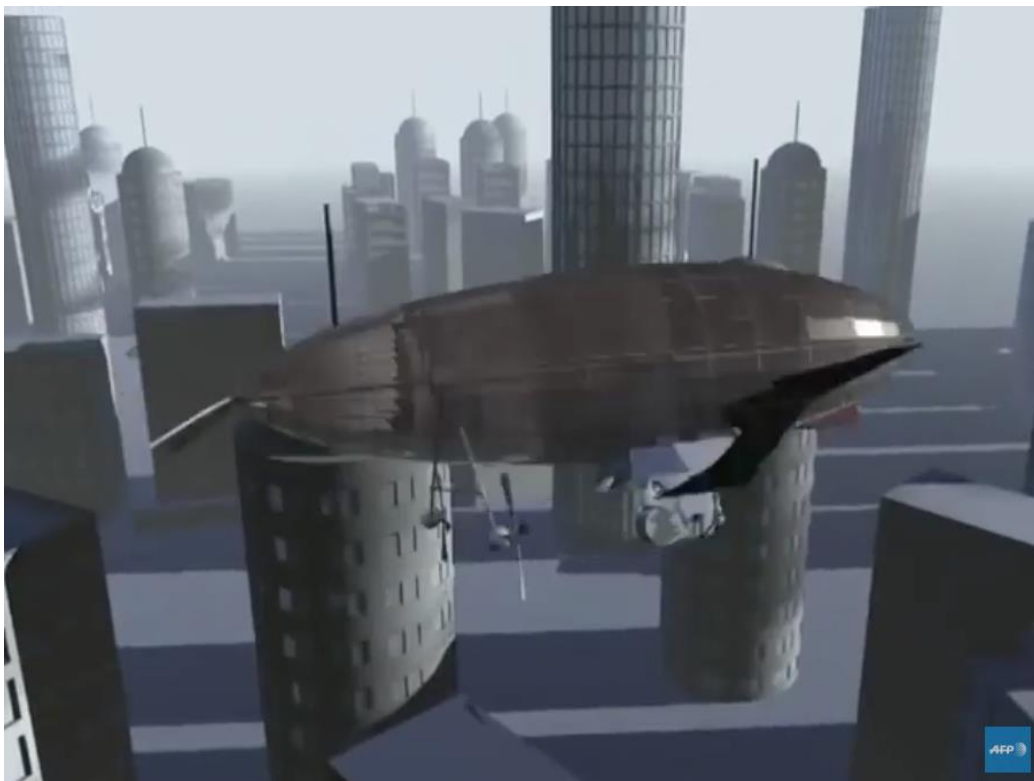
1/12th scale model of the Aerolabe with the ornithopter mounted beneath the gas envelope. Source: screenshots from video.



Main propulsion via ornithopter. Source: screenshots from video.



Propulsion via ornithopter wings and flapping tail supplemented by two propellers. Source: screenshots from video.



Rendering of a Steampunk-looking Aerolabe airship flying through a cityscape. Source: screenshots from video.

For additional information

- “Aerolabe: Solar blimp to offer zero-emission ride into future,” Green Diary, 2010: <https://greendiary.com/aerolabe-solar-blimp-to-offer-zero-emission-ride-into-future.html>
- “Sustainable airships promising a clean future of transportation and surveillance,” Green Diary, 2010: <https://ecofriend.com/20-sustainable-airships-promising-a-clean-future-of-transportation-and-surveillance.html>

Other *Modern Airships* articles

- *Modern Airships - Part 1*: <https://lynceans.org/all-posts/modern-airships-part-1/>
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