

Aerolabe: solar-powered ornithopter airship

Peter Lobner, 6 August 2019

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. 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. <https://www.youtube.com/watch?v=c9FFRzZouII>



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



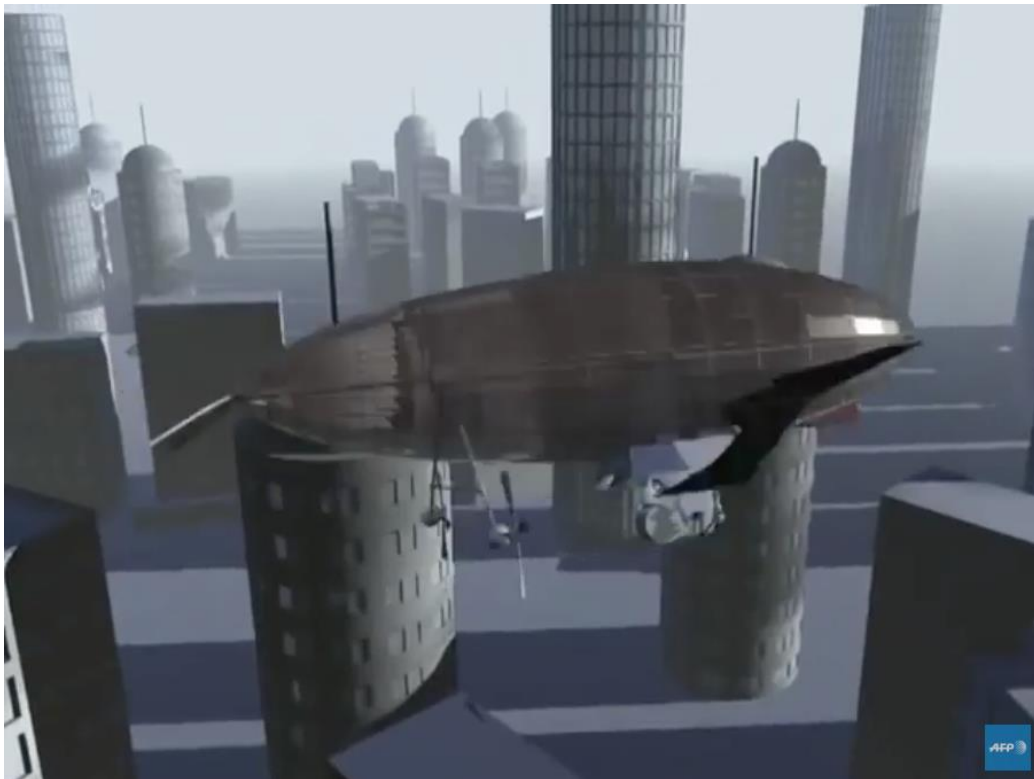
1/12th scale model of the Aerolabe with the ornithopter mounted beneath the gas envelope. Source: screenshots from video.



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.