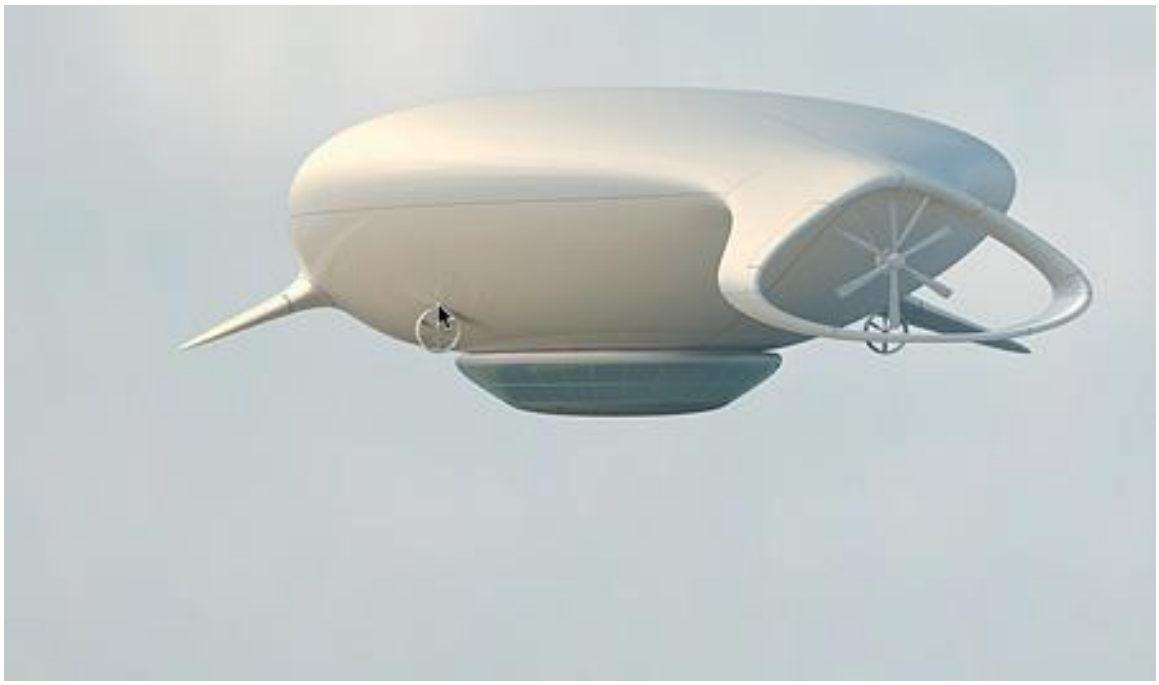
The Manned Cloud rigid airship

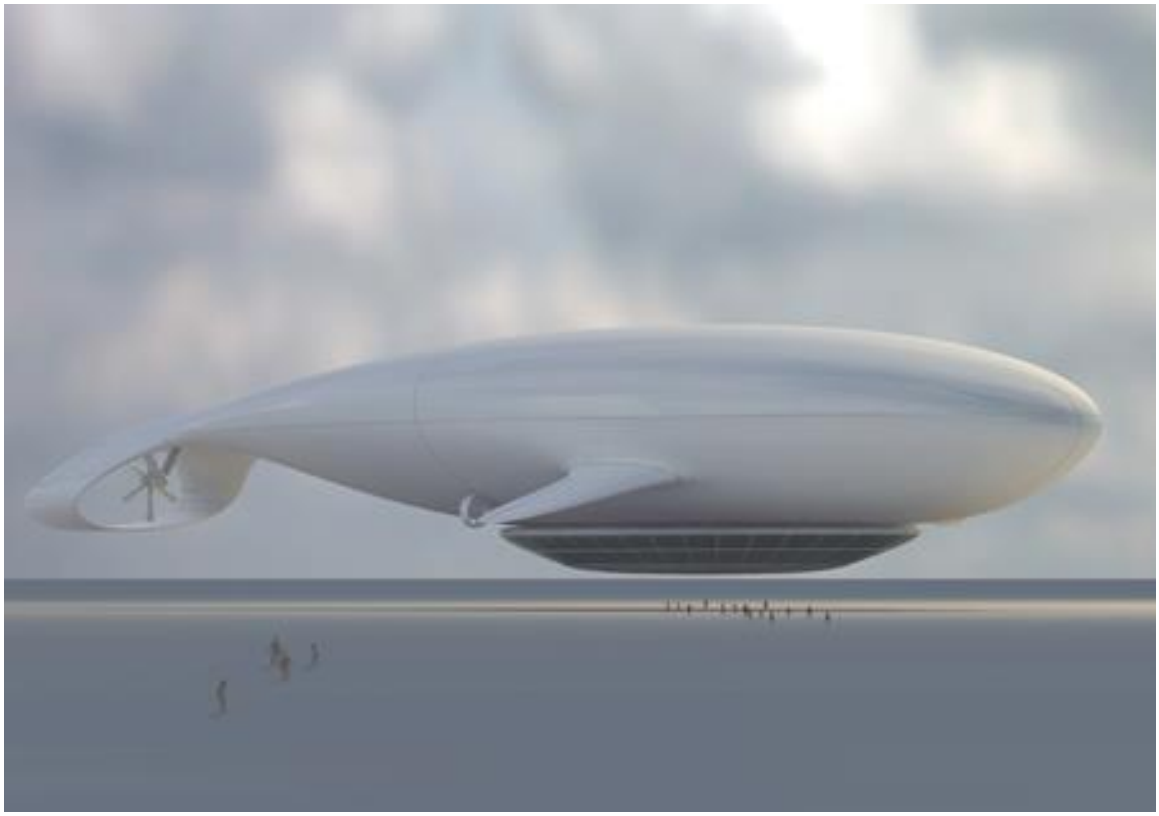
Peter Lobner, 28 July 2019

The whale-shaped "Manned Cloud" flying hotel concept was developed by French industrial designer Jean-Marie Massaud starting in 2005, in collaboration with the French national aerospace research laboratory ONERA (Office National d'Etudes et de Recherches Aérospatiales). Massaud described his goal for the Manned Cloud:

> "Living in the sky, watching the Earth from above. Rediscovering the marvel of traveling, experiencing contemplation. Exploring the world without trace……Manned Cloud is an alternative project around leisure and travelling in all its form, economic and experimental, still with the idea of lightness, human experience and life scenarios as the guiding principles. The spiral of Archimedes is the driving force of this airship in the form of a whale that glides through the air."

In France, Massaud was voted "Designer of the year 2009" by Now! Design à vivre for his work on the Manned Cloud.





Four views of the Manned Cloud airship.
Source for all: https://www.mbandf.com/en/parallel-world/manned-cloud-by-jean-marie-massaud

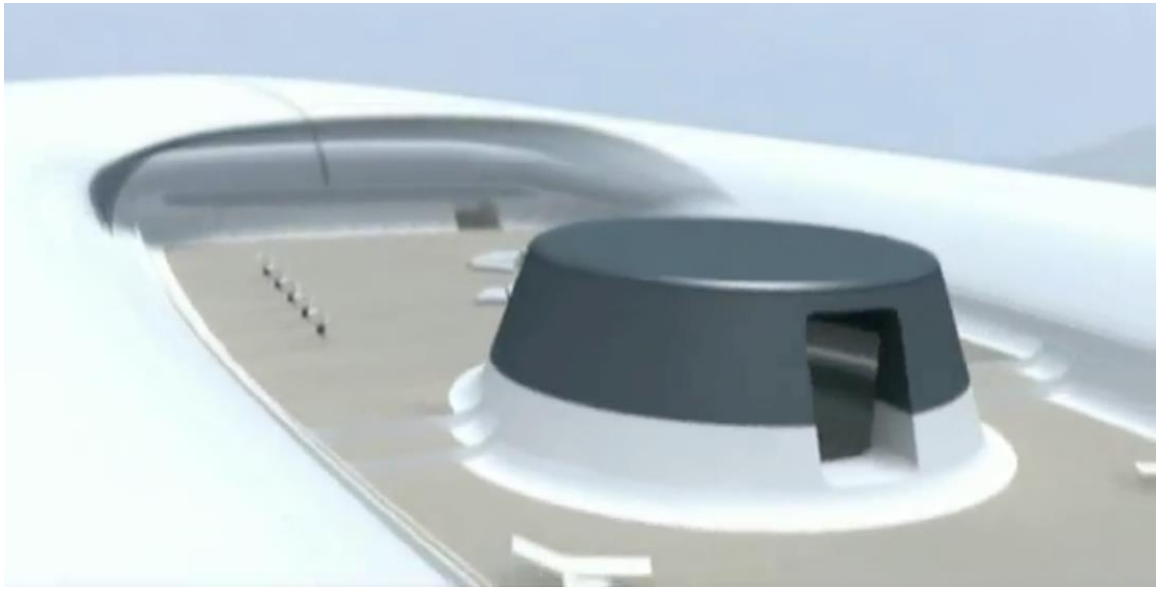
Passenger accommodations are provided in a two-deck main cabin beneath the gas envelope and a terrace level with a sundeck on top of the gas envelope.

- The first (lower) deck has 500 square meters (5,382 square feet) of public space with a restaurant, lounge, library and fitness area.
- The second (upper) deck has 600 square meters (6,458 square feet) for 20 passenger rooms with panoramic windows, a spa and a bar.
- The terrace level sundeck is accessed from the main cabin via an elevator.

You can take a short video tour of Jean-Marie Massaud's Manned Cloud airship concept here:

https://www.massaud.com/node/386

Public space on the first deck.
Source: Screenshot from video tour.

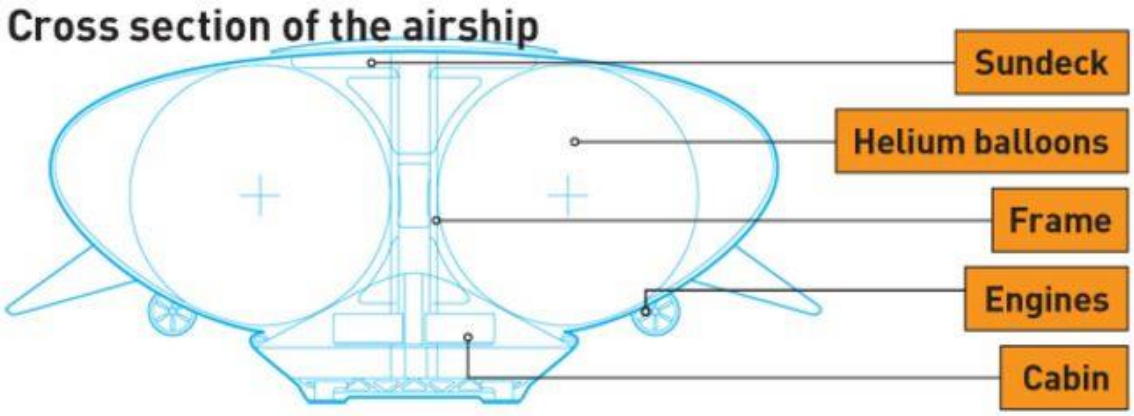


Terrace level sundeck.
Source: Screenshot from video tour.

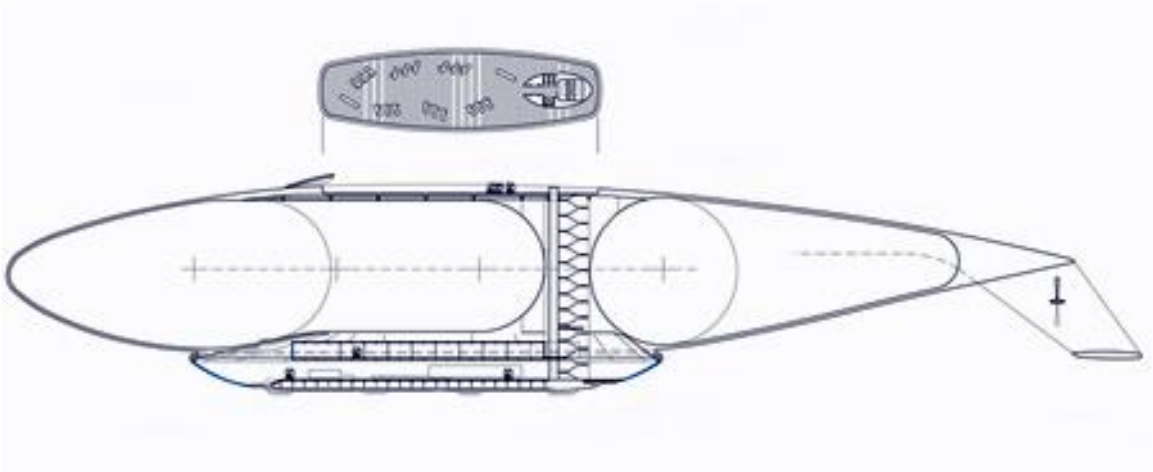
The Manned Cloud is a rigid airship, with the following technical characteristics:

- Capacity: 40 passengers + 15 crew members
- Gas volume: 520,000 cubic meters (18,363,000 cubic feet)
- Dimensions: L 210 x W 82 x H 52 meters (689 x 269 x 171 feet)
- Power and propulsion: Six small ”turbo” engines (likely turbo-diesel or micro turbine) rated at 450 kilowatts each (2.7 megawatts total) provide electrical power. Main propulsion is delivered by an electrically-driven 4.9 meter (16 ft) diameter main propeller mounted in an aerodynamic ring at the stern of the airship. Two flank-mounted, shrouded, vectorable thrusters provide assistance during maneuvering and vertical takeoff and landing.
- Unrefueled range / endurance: 5,000 km (3,108 miles) / 72 hours.
- Maximum speed: 170 kph (106 mph)
- Cruising speed: 130 kph (81 mph)
- Maximum altitude: 18,000 ft (5,486 meters)
- Inflight ballast control: Ballonets inside the hull are inflated with air to add weight and manage buoyancy as fuel is burned.

Source: Popular Science, 3 June 2008



Source: Popular Science, 3 June 2008



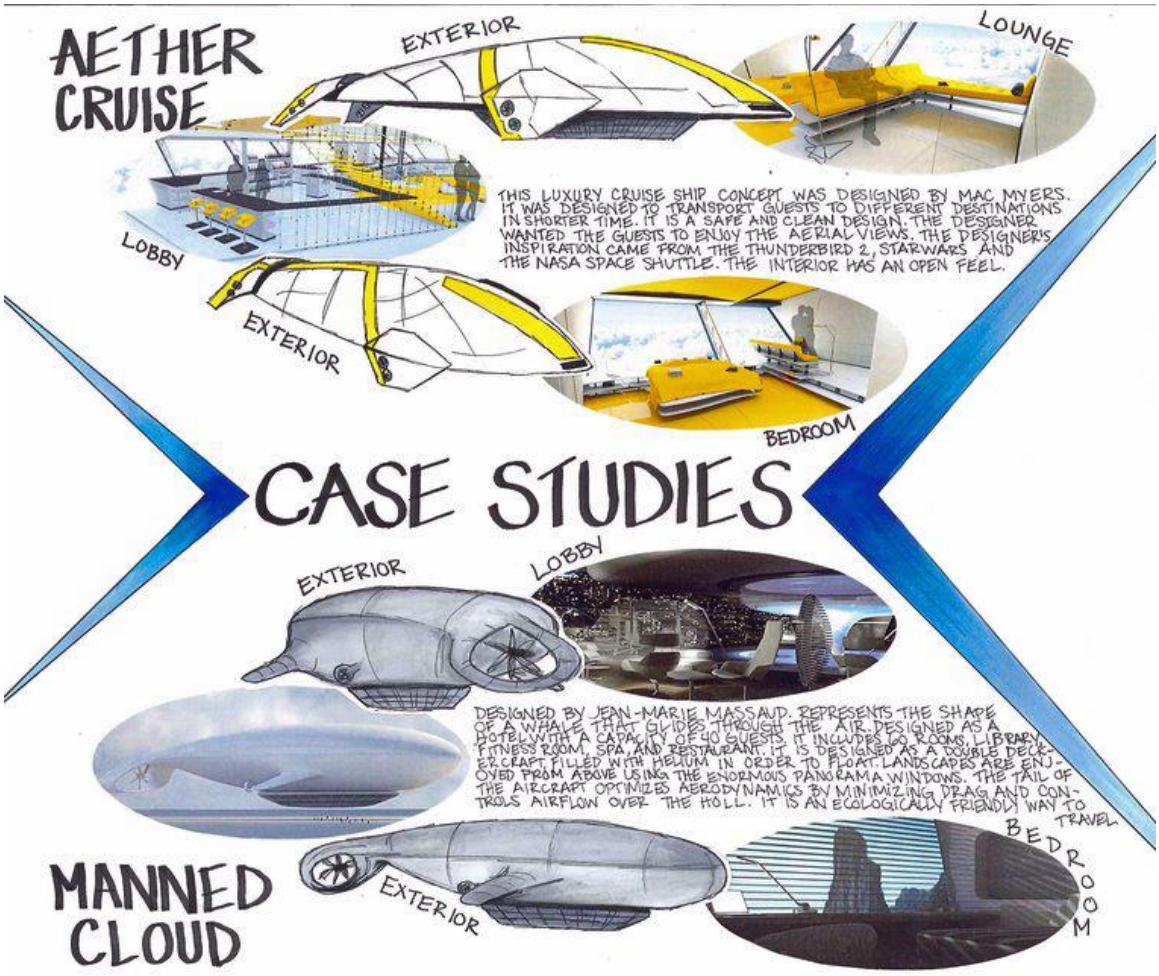
Longitudinal section and a top view of the sundeck.
Source: adapted from https://www.massaud.com/node/386

The firm K+ Development and Design (KEYMAN + DESIGN), in Erie, PA, was founded in 2015 by Keyman Asefi to promote the concept of emotional interior architecture, which focuses on developing the most innovative environment for the occupants. The firm's website is here:

http://www.keyman-asefi.com/about#aboutkeymanasefi

Among the case studies presented on this website is one for "future living," which developed the following graphic that focuses on the design aesthetics of the Manned Cloud airship and the Aether "Sky Cruise" airship concept designed by Mac Meyers of Avalon Airships

in Manchester, UK. Clearly, both of these airship concepts and their interior designs are in a class by themselves, not to be confused with most other modern, but utilitarian, heavy-lift airship designs.



Source: adapted from http://www.keyman-asefi.com/mercyhurst-university