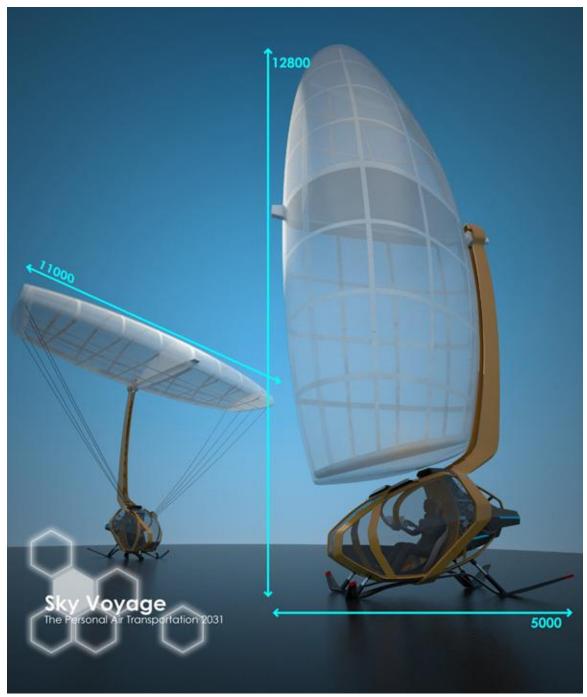
Sky Voyage - hybrid personal airship concept

Peter Lobner, updated 8 February 2022

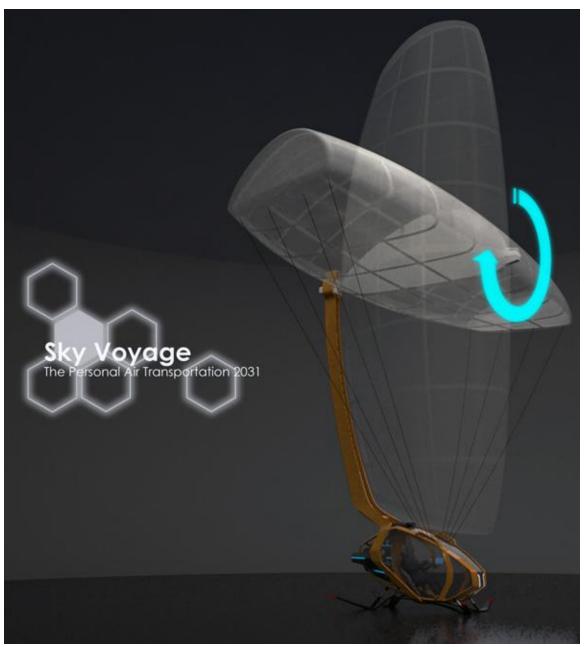
Sky Voyage is a 2012 design concept by Australian designer Jet Shao for a hybrid airship / aircraft that can take off vertically by inflating a wing-shaped helium gas envelope in an upright position. Once airborne, the gas envelope can be rotated to the horizontal position to serve as a wing and generate aerodynamic lift. The craft can operate as a glider or as a powered craft aided by small hydrogen fuel-cell powered vectoring propulsors that deliver thrust for forward flight and for vertical takeoff and landing.



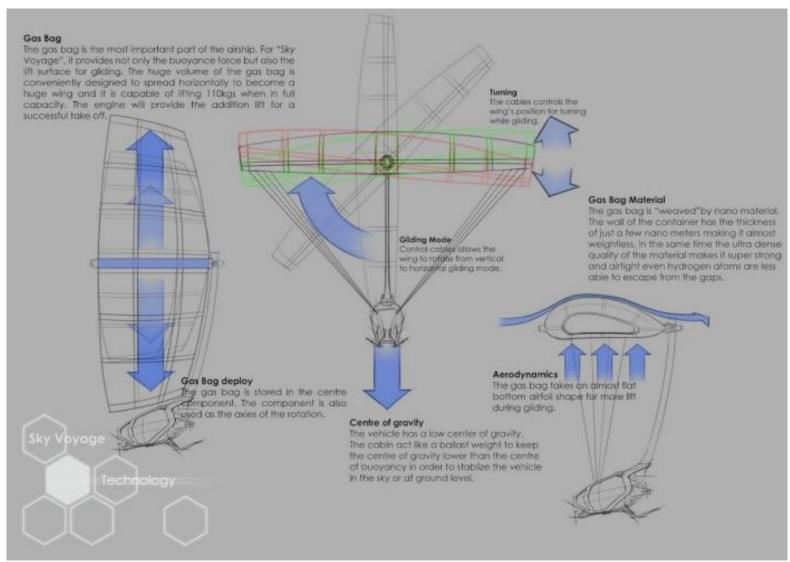
Sky Voyage in gliding flight. Source: Yanko Design



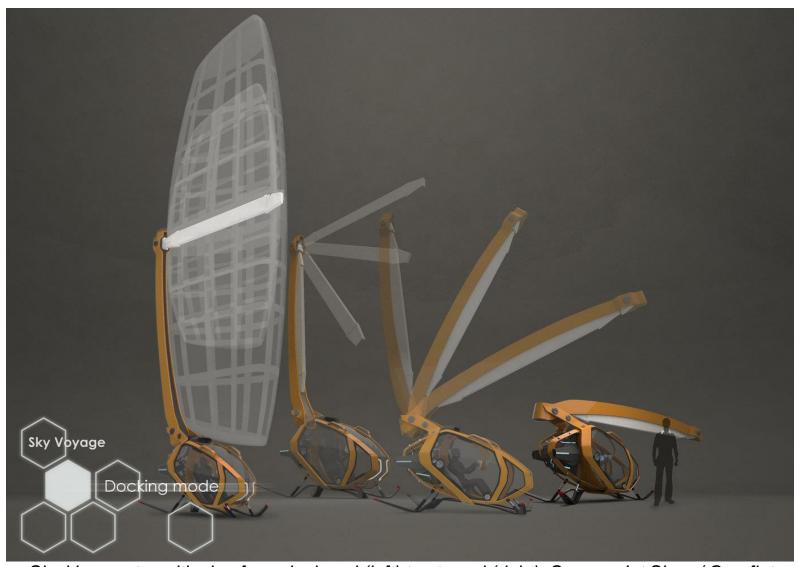
Sky Voyage shown in the foreground with its wing-shaped gas envelope in the vertical position for vertical takeoff and landing (VTOL) and, in the background, with the wing rotated into the horizontal position for aerodynamic lift during gliding / powered flight. Source: Yanko Design



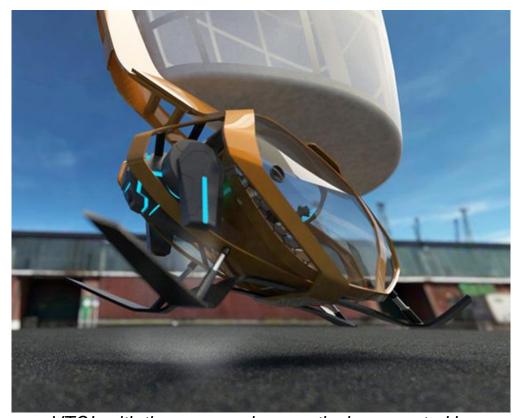
The rotating gas envelope ("wing") is positioned and supported at its center by a folding pylon connected to the gondola structure. Lines from the gondola to the tips of the gas envelope control the rotational position of the "wing." Source: Yanko Design



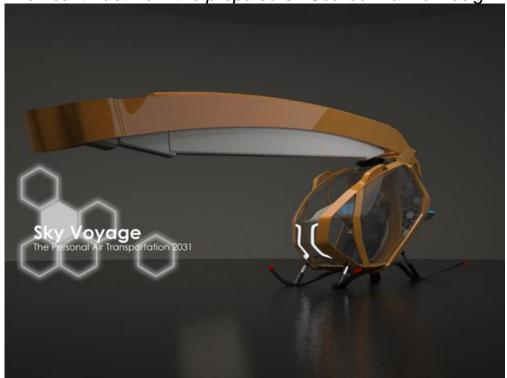
Sky Voyage principles of flight. Source: Jet Shao / Coroflot



Sky Voyage transitioning from deployed (left) to stowed (right). Source: Jet Shao / Coroflot



VTOL with the gas envelope vertical augmented by vertical thrust from the propulsors. Source: Yanko Design



Gas envelope and pylon stowed. Source: Yanko Design

For more information

- Jet Shao, "Sky Voyage," Coroflot, 2012: https://www.coroflot.com/runaway_prototype/Sky-Voyage
- Troy Turner, "Airborne Ecocraft," Yanko Design, 10 February 2012: https://www.yankodesign.com/2012/02/10/airborn-ecocraft/

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