Sky Voyage: hybrid personal airship concept

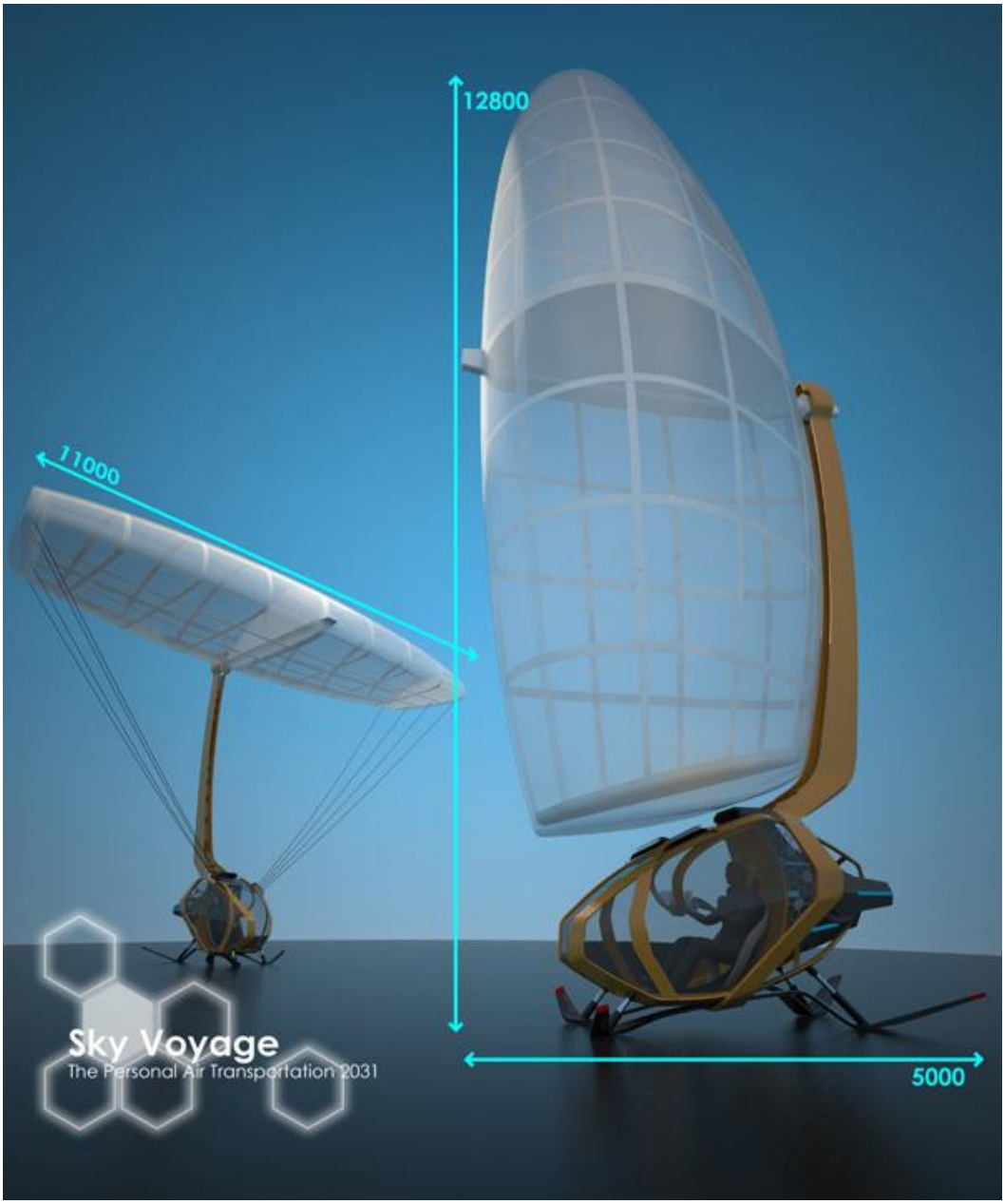
Peter Lobner, 7 August 2019

Sky Voyage is a 2012 design concept by 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.

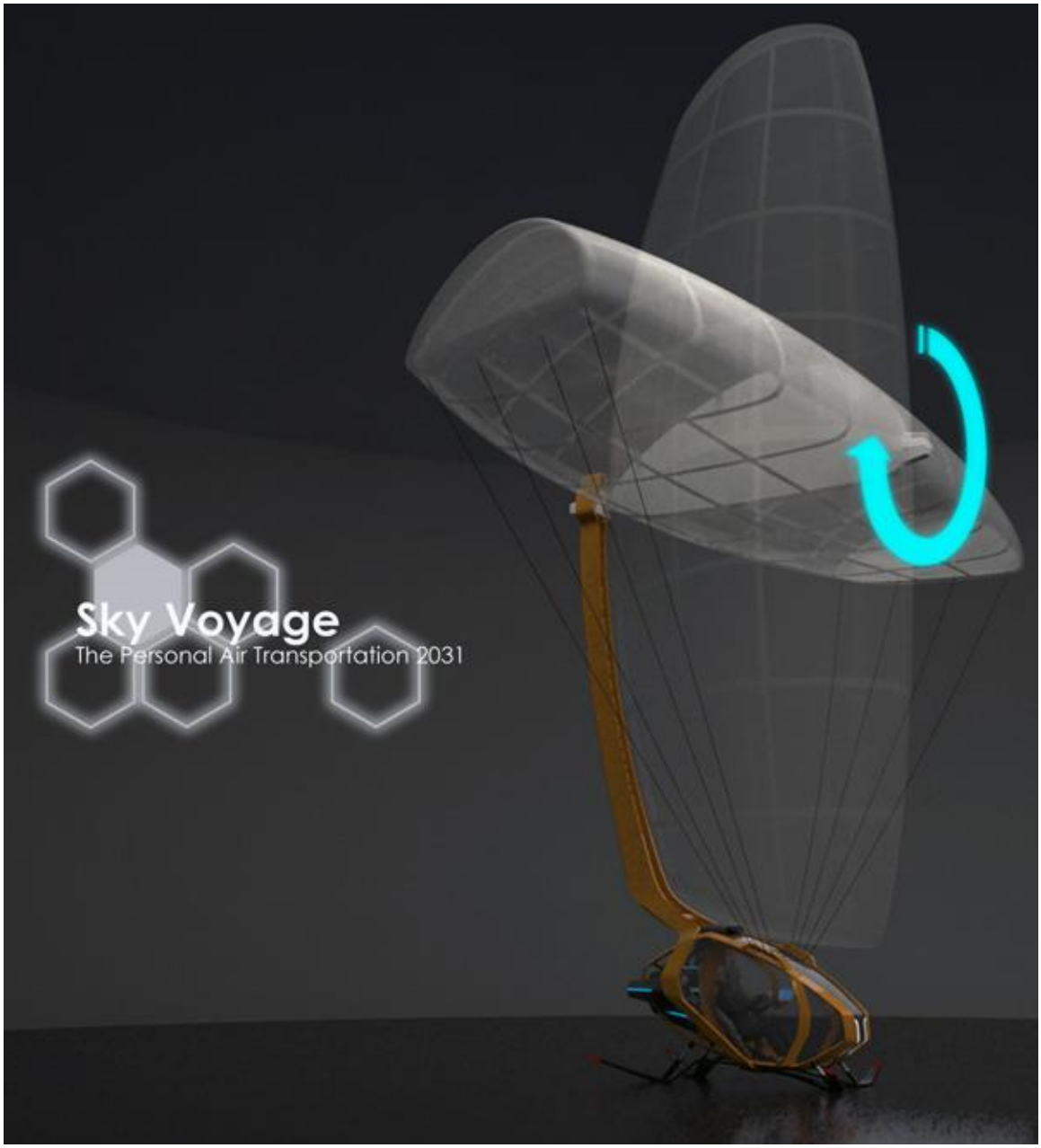
Source: Yanko Design

You'll find more details on the Sky Voyager hybrid personal airship on the Yanko Design website at the following link. This was the source of the graphics in this section.

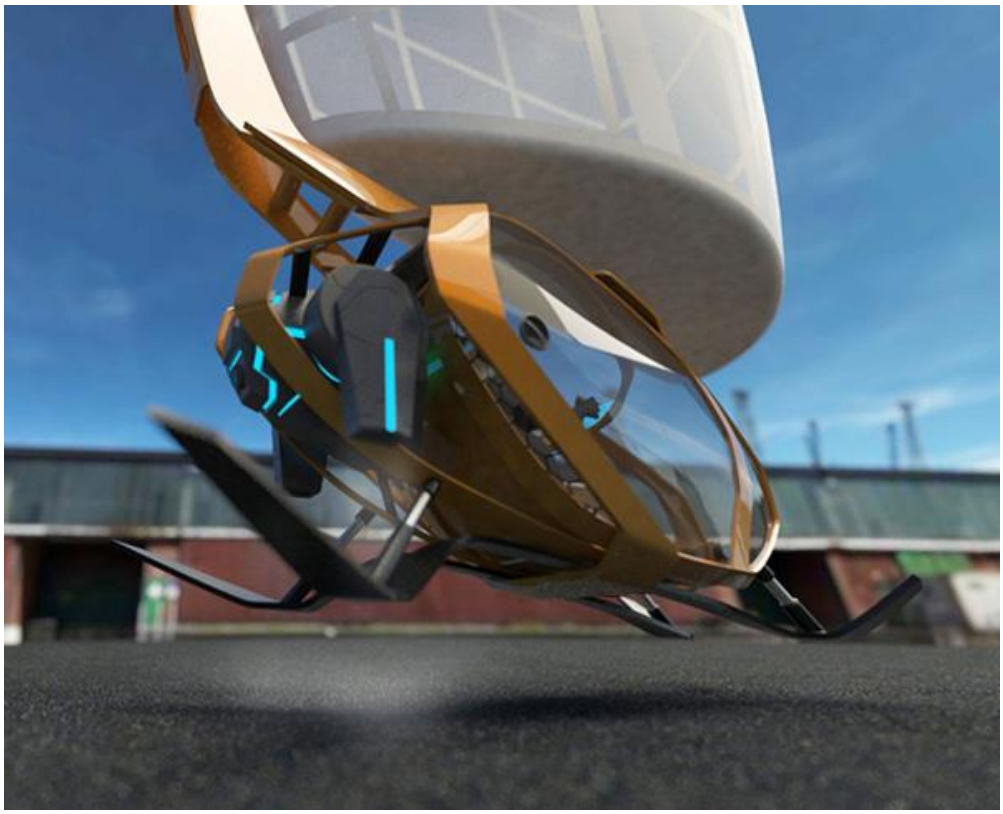
https://www.yankodesign.com/2012/02/10/airborn-ecocraft/



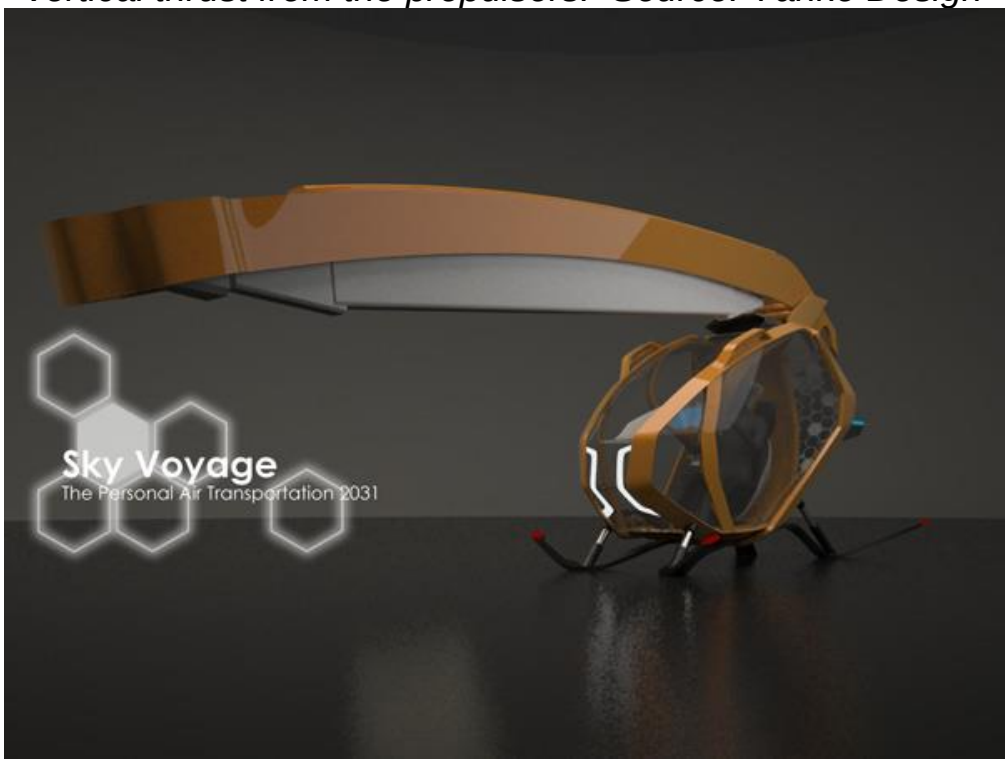
Sky Voyager with wing-shaped gas envelope shown in the vertical position for vertical takeoff and landing (VTOL) and rotated into the horizontal position for aerodynamic lift during gliding / powered flight. Source: Yanko Design



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



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



Gas envelope pylon folded. Source: Yanko Design