

Airlander 10 Technical Data

Envelope Volume:	38,000 m ³	(1,340,000 ft ³)
Overall Dimensions:		
- length	92 m	(302 ft)
- width	43.5 m	(143 ft)
- height	26 m	(85 ft)
Endurance:	5 days manned	
Altitude:	up to 20,000 ft	(6,100 m)
Speed:		
- cruise	80 Knots	(148 km/hr)
- loiter	20 Knots	(37 km/hr)
Total Weight:	20,000 kg	(44,100 lbs)
Payload capacity:	up to 10,000 kg	(22,050 lbs)

Envelope

Helium filled, laminated fabric construction hull. The hull's aerodynamic shape, an elliptical cross-section allied to a cambered longitudinal shape, provides up to 40% of the vehicle's lift. The internal diaphragms required to support this shape allow for a limited amount of compartmentalisation further enhancing the fail-safe nature of the vehicle. Multiple ballonets located fore and aft in each of the hulls provide pressure control.

Landing System

Profiled pneumatic tubes / skids on the underside of the two outer hulls provide for multi-surface ground operation including amphibious capability. Skids are 'sucked-in' for a clean-in-flight profile.

Power Plant

4 x 350 hp, 4 litre V8 direct injection, turbocharged diesel engines. Two engines mounted forward on the hull and two on the stern of the hull for cruise operation. All four are configured in ducts with blown vanes to allow vectored thrust for take-off/landing/ground handling operation.

Payload Module

Located on centreline; comprises 3 primary areas as follows:

Flight Deck:

- 1 pilot station.
- Large transparencies for excellent all-round visibility.
- Payload compartment.

Mid-body:

- Centreline payload beam for externally slung loads.

Aft-body:

- Fuel tanks and additional payload space



Hybrid Air Vehicles HAV304, now renamed Airlander 10, on its first flight in August 2012 at Lakehurst, NJ