Vantage Airship Manufacturing Co., Ltd. (Vantage) hybrid airships

Peter Lobner, 28 July 2019

Vantage has been working in Shanghai, China in the airship field for nearly 30 years, primarily developing and manufacturing non-rigid manned airships, remote-controlled non-rigid airships and tethered aerostats. Non-rigid airships currently in production are the CA-20R UAV airship, CA-80/CA-120 airship and the CA-800/CA-3000 airship. Their website is here:


Vantage is developing designs for two large hybrid (“combined loading”) transportation airships with the following technical parameters:

**CA-60T**

- Length: 165 meters (514 ft)
- Width: 80 meters (262 ft)
- Height: 48 meters (157 ft)
- Airbag volume: 180,000 m$^3$ (6,356,640 ft$^3$); air ballonet volume 26%
- Payload: 60 metric ton (66 short ton)
- Cabin dimensions: 30 L x 8 W x 4 H meters (98.4 x 26.2 x 13.1 ft)
- Speed: 120 kph (75 mph) cruise; 150 kph (93 mph) maximum
- Range: 3,000 km (1,864 miles)
- Practical ceiling: 3,000 meters (9,843 ft)

**CA-200T**

- Length: 220 meters (722 ft)
- Width: 113.8 meters (373 ft)
- Height: 66 meters (217 ft)
- Airbag volume: 600,000 m$^3$ (21,188,800 ft$^3$); air ballonet volume 26%
- Payload: 200 metric ton (220 short ton)
- Cabin dimensions: 60 L x 12 W x 8 H meters (196.9 x 39.4 x 26.2 ft)
- Speed: 120 kph (75 mph) cruise; 160 kph (99 mph) maximum
- Range: 3,000 km (1,864 miles)
- Practical ceiling: 3,000 meters (9,843 ft)
The general configuration of the Vantage hybrid airship appears to be similar to the Airlander 10 and 50 being developed in the UK by Hybrid Air Vehicles (HAV) and the Lockheed Martin LMH-1 being developed in the US.

![Concept graphic showing the general configuration of a CA-60T / CA-200T airship. Source: Vantage](image)

It has been reported that Vantage intends to pursue development of these hybrid airships with international partners. The schedule for first flight of a Vantage hybrid airship has not been announced.