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

Peter Lobner, Updated 3 April 2021

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-80, CA-150, CA-180 and CA-300 manned airships and a variety of remotely controlled blimps. In addition, Vantage is developing designs for two large hybrid "transportation airships."

The Vantage website is here: http://www.vantageship.com/en/

Vantage is developing designs for two large hybrid ("combined loading") transportation airships, the CA-60T and the CA-200T.



Concept graphic showing the general configuration of a CA-60T / CA-200T airship. Source: Vantage

Technical parameters for these hybrid airships are summarized below.

Parameter	CA-60T	CA-200T
Length	165 meters (514 ft)	220 meters (722 ft)
Width	80 meters (262 ft)	113.8 meters (373 ft)
Height	48 meters (157 ft)	66 meters (217 ft)
Envelope volume	180,000 m³ (6,356,640 ft³); air ballonet volume 26%	600,000 m³ (21,188,800 ft³); air ballonet volume 26%
Payload	60 metric ton (66 short ton)	200 metric ton (220 short ton)
Cabin dimensions	30 L x 8 W x 4 H meters (98.4 x 26.2 x 13.1 ft)	60 L x 12 W x 8 H meters (196.9 x 39.4 x 26.2 ft)
Speed	120 kph (75 mph) cruise; 150 kph (93 mph) max	120 kph (75 mph) cruise; 160 kph (99 mph) max
Range	3,000 km (1,864 miles)	3,000 km (1,864 miles)
Practical ceiling	3,000 meters (9,843 ft)	3,000 meters (9,843 ft)



Vantage CA-200T. Source: Vantage

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.

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.