

Cargo Airship Ltd.

Peter Lobner, 12 February 2022

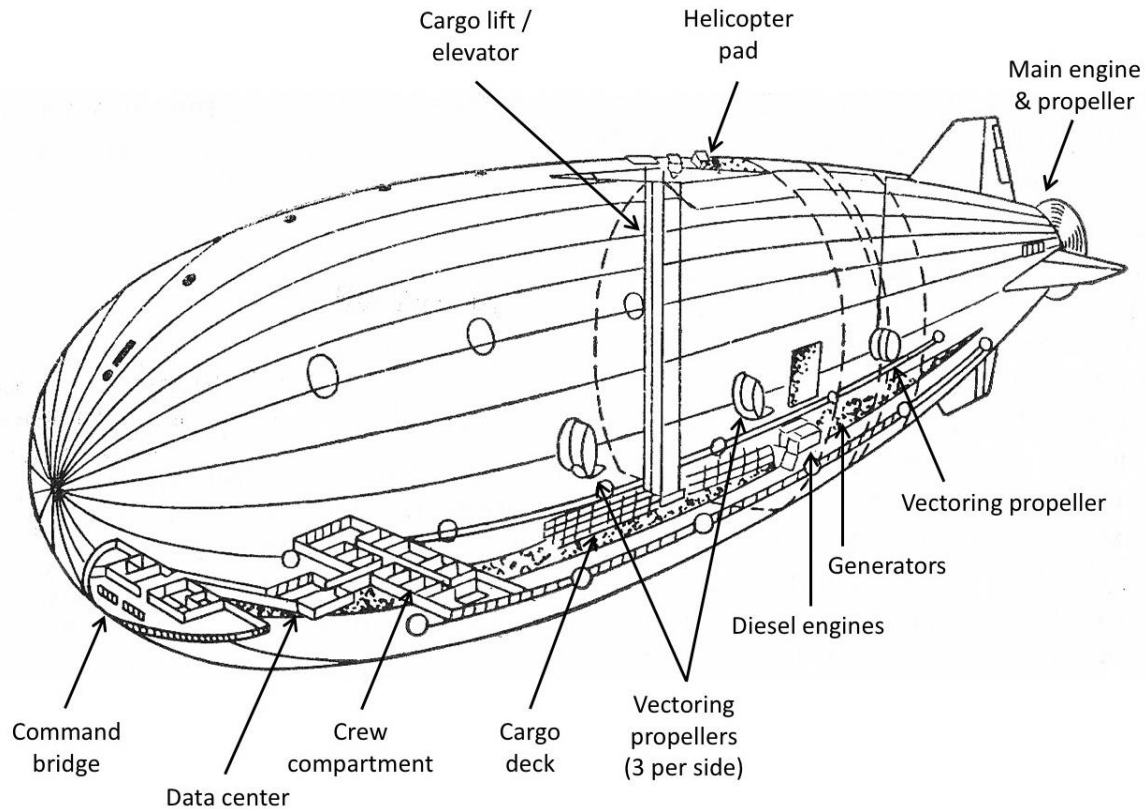
In the late 1960s, the UK firm Cargo Airship Ltd., a development company within the shipping group Manchester Liners Ltd., developed a rigid, heavy-lift cargo airship concept for transporting containerized cargo on long-haul routes. The focus on containerized cargo was consistent with Manchester Liners' business decision in 1968 to transition their future cargo ship fleet to container ships only.



Interviewed by the Swedish newspaper Svenska Dagbladet (SvD) in July 1971, Max Rynish, director of Cargo Airship Ltd., stated that he saw the future of airships as an extension of the container revolution (occurring worldwide since the late 1960s). “With them you can arrange cheap transport from ‘door to door,’ which is also gentle on the environment.” Cargo Airship Ltd.’s giant airship would be able to transport 500 metric tons (550 tons) of goods from the UK to Australia in six days, without transshipment and at half the price of normal air freight.

This was a conventional rigid airship, with the hull framework being formed by light metal transverse frames that were joined by longitudinal stringers and braced with diagonal and transverse wires. The outer shell of the hull was made of fiberglass panels. The helium lift gas was carried in low-permeability cells secured within the hull. This 370 meter (1,214 foot) long cargo airship was longer than the passenger liner *Queen Elizabeth II* and its rigid gas envelope had about five times the volume of the LZ-129 *Hindenburg*.

A novel feature of the Cargo Airship Ltd.’s design concept was that receipt and delivery of the cargo containers would be accomplished with helicopters operating from a landing pad on the top of the hull. A cargo lift would move the containers between the landing pad and the cargo hold on the lowest deck inside the hull, where other handling equipment would position and secure the containers for flight.



*General arrangement of the Cargo Airship Ltd. airship.
Source: Adapted from Arie (1986)*

General characteristics of the cargo airship

Parameter	Cargo Airship Ltd.
Length *	360 to 370 m (1,181 to 1,214 ft)
Diameter, max	76 m (249.3 ft)
Envelope volume *	930,000 to 1,132,000 m ³ (32,843,000 to 39,976,000 ft ³)
Payload	500 metric tons (550 tons)
Speed, max	160 kph (99.6 mph)
Range	Intercontinental

**Available sources vary on the value of this parameter.*

The airship's main engine was located in the tail section, where it drove a single large propeller at the tail. In addition, six thrust vectoring propellers (three on each side of the hull) provided propulsion and control at low speed when the aerodynamic controls were ineffective.

Cargo Airship Ltd. never built their giant cargo airship.

Manchester Liners did transition its surface fleet to container ships and continued operating these ships until 1985. The firm was taken over by the Orient Overseas Container Line in 1988.

For more information

- M. Ya. Arie, "Dirigibles" (in Russian), Publishing House "Naukova Dumka", Kiev, Ukraine, 1986

Other *Modern Airships* articles

- *Modern Airships - Part 1*: <https://lynceans.org/all-posts/modern-airships-part-1/>
- *Modern Airships - Part 2*: <https://lynceans.org/all-posts/modern-airships-part-2/>
- *Modern Airships - Part 3*: <https://lynceans.org/all-posts/modern-airships-part-3/>