

Flying the flag for an airship revolution

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The rise of freight airships could go down like a lead balloon with traditional aircraft companies but could also represent a new high for Asian companies seeking to exploit new ways to reach world markets, according to research published in the *International Journal of Aviation Management*.

Barry Prentice of the I.H. Asper School of Business, at the University of Manitoba, Canada and Yui-yip Lau of The Hong Kong Polytechnic University, in Kowloon, Hong Kong, and currently working alongside Prentice in Manitoba, explain how the reinvented technology of airships has come apace in recent years and is a far cry from the trial and error methods and primitive materials used to build the giant Zeppelins of yesteryear. They have thus developed a new conceptual model, which they refer to as the value-density cargo pyramid, to help them analyze dedicated cargo airplanes, sea-air logistics, sea containers and transport airships, through the busy trade corridors between Hong Kong and Europe and North America.

The benefits of airships over "conventional" freight vehicles - airplanes, ships, trains and trucks, for instance, is that they can fly over land and sea, access coastal ports, airports and reach remote inland regions too. "The transport airship is a disruptive technology that has the potential to modify freight transport markets, change geographical advantage and alter world trade patterns," the team explains. They point out that these advantages coupled with relatively low costs and a smaller carbon footprint might make airships the freight transport choice of the future sooner than the conventional couriers anticipate.

However, airships could simply fill a niche rather than out-competing conventional aircraft. Airships are slower than airplanes, but have much bigger capacity and loading doors and so could reduce the economic barriers for the carriage of low-density and low value-perishable cargoes that are usually sent by even slower marine routes. "This is a sizeable market, and one that does not necessarily erode the markets of established carriers," the team points out.

"Both technical and economic reasons lie behind the 80-year delay in the commercialization of large freight carrying [airships](#), but in the 21st century no obvious technological barriers remain. The race is on to create this new transportation mode and the first-movers will have an advantage," the team concludes. We are looking forward to the day when someone will actually be able to calibrate the value-density pyramid.

More information: Prentice, B.E. and Lau, Y-Y. (2016) 'Market potential for transport airships in service to Hong Kong', *Int. J. Aviation Management*, Vol. 3, No. 1, pp.68-83. [DOI: 10.1504/IJAM.2016.078665](https://doi.org/10.1504/IJAM.2016.078665)

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