Dare to Dream yacht & Flying Diamond airship

Peter Lobner, 8 February 2022

1. Introduction

In 2017, Monaco-based designer and artist George Lucian introduced his design concept for a remarkable "super yacht airship carrier" named *Dare to Dream* and its companion airship named *Flying Diamond*. In addition to all the services that a super yacht can offer, the airship in an over-the-top yachting feature that offers an unparalleled opportunity for luxurious air travel between the yacht and the destination of your choice, or simply an enjoyable aerial tour of a beautiful destination.

Lucien admits that his creation is largely fantasy but says it could be built. His website is here: https://www.georgelucian.com/portraiture



The 140 m (460 ft) Dare to Dream and the 100 m (330 ft) Flying Diamond in profile. The top of the ship's pyramidal bridge is the mooring mast for the airship. Source: George Lucian

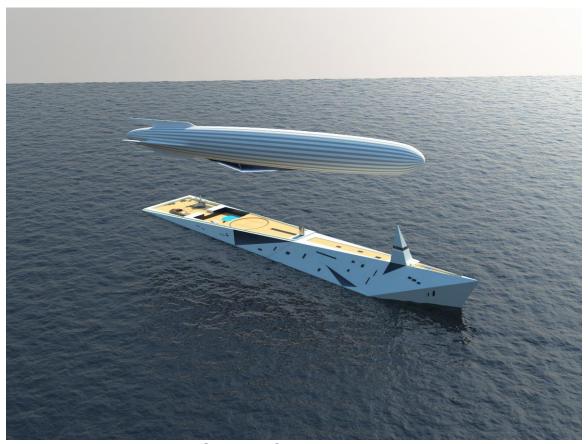
2. Description of the yacht and airship

Dare to Dream has accommodations for 12 guests and 40 crew. Top deck includes the airship docking facilities, helipad, Jacuzzi and sundeck. Passenger facilities on the lower deck include staterooms, dining room, and lounge.

Yacht Harbour reports:

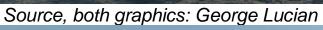
"The concept is designed in such a way that, beside all the amenities that the superyacht would offer, the airship itself is able to accommodate a couple of guests, and host a saloon for dinners/cocktails/relaxation. The airship is expected to be around 100m, whilst the yacht would measure 140m."

The 2017 YouTube video, "Will 'Dare to Dream' superyacht concept revolutionize world travel?" (1:50 minutes) is at the following link: https://www.youtube.com/watch?v=ZuWQ6RgBW8I



Source: George Lucian

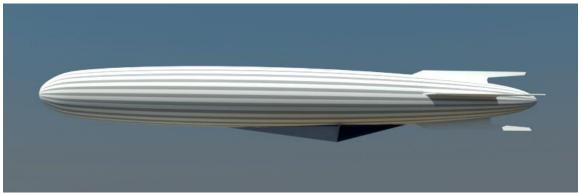








Lucian's graphics show the airship secured at three points when it is moored to the yacht: (1) a mooring mast at the nose, (2) a deck pedestal amidships (forward of the gondola), and (3) two spring lines tied from the airship's rigid lower fin to deck cleats at the stern of the ship. There must be limitations on the operation of the ship while the airship is moored. However, these are unstated.



Source, both graphics: George Lucian



Source: George Lucian

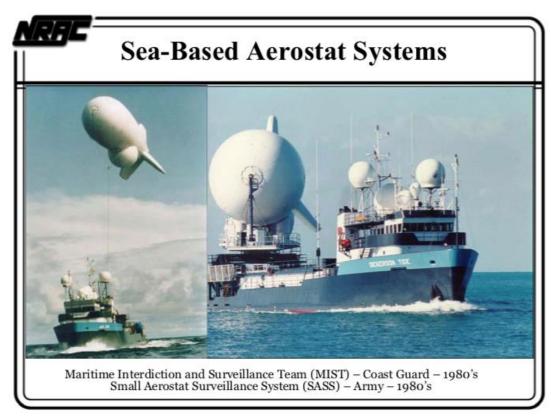
3. Experience with sea-based lighter-than-air craft

In 2006, the US Naval Research Advisory Committee (NRAC) examined the use of lighter-than-air craft in marine applications, one of which was the operation of a large, tethered aerostat from a ship at sea. NRAC reported the following:

"During the 1980s, ships with aerostats operated in the Gulf of Mexico to carry out drug-interdiction missions through the Maritime Interdiction and Surveillance Team (MIST) conducted by the Coast Guard, and the Small Aerostat Surveillance System (SASS) conducted by the Army. Both programs used ship-based aerostats to look for fast drug boats. Both were successful at detecting and tracking small boats suspected of drug trafficking. The ships hosting the aerostats traveled at less than 10 knots. The bad weather in the Gulf of Mexico and limited availability of ships contributed to the demise of both the MIST and the SASS programs."

"However, these programs demonstrate the feasibility of operating aerostats on slow speed ships and the feasibility of carrying sensors capable of detecting small high speed boats from aerostat operating altitudes."

It appears that these ships had a rotating mooring deck that could keep a moored aerostat pointed into the wind (or the relative wind when the ship was underway). You can see this feature in the following NRAC graphic.



Source: NRAC (April 2006)

4. For more information

- "George Lucian introduces 140m concept Dare to Dream,"
 Yacht Harbour, 15 February 2017:
 https://yachtharbour.com/news/george-lucian-introduces-140m-concept-dare-to-dream-1482
- Phoebe Weston, "Now that's ambitious! Designer reveals a superyacht concept with a 100-metre-long AIRSHIP on deck," Daily Mail, 27 March 2017: https://www.dailymail.co.uk/sciencetech/article-4353308/Incredible-images-superyacht-called-Dare-Dream.html
- "Lighter Than Air," Report NRAC 06-02, Naval Research Advisory Committee, April 2006: https://apps.dtic.mil/dtic/tr/fulltext/u2/a461633.pdf

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