

# World's largest aircraft, the Airlander 10, has successful maiden flight

By Rob Davies, The Guardian, adapted by Newsela staff on 08.24.16

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The Hybrid Air Vehicles HAV 304 Airlander 10 hybrid airship is seen in the air over a road on its maiden flight from Cardington Airfield near Bedford, north of London, on August 17, 2016. The Hybrid Air Vehicles 92-metre long, 43.5-metre wide Airlander 10, billed as the world's longest aircraft, lifted off for the first time from an airfield north of London. Photo: JUSTIN TALLIS/AFP/Getty Images

A shiny, futuristic aircraft the size of a soccer field ascends into the evening sky. Down below in rural Bedfordshire, England, amazed onlookers crane their necks for a better view. It is the maiden flight of the Airlander 10, a power-driven airship that uses helium to float.

The flight has been a while coming, with the first one delayed several times, and this takeoff was held up for hours. However, now that it is in the air, banking and soaring for its audience, the Airlander is quite a spectacle.

## **U.S. Pulled Out Of Airlander Project**

The Airlander is the world's largest aircraft, at 92 meters (302 feet) long and 43 1/2 meters (143 feet) wide. It dwarfs the biggest airliner in the world, the Airbus A380 superjumbo. The Airlander is also less expensive, with a price of £25 million (\$33 million), compared with £287 million (\$375 million) for an A380. It can even carry 10 tons of weight, similar to military transport helicopters such as the Boeing CH-47 Chinook.

The United States was a key player in getting the Airlander off the ground. The U.S. Air Force poured about \$300 million into the project and the military planned to use the airship to keep watch over battlefields, as it is capable of staying in the air for 21 days at a time, unmanned. However, when the U.S. government slashed military budgets in 2013, the Airlander was discontinued.

The company that built the Airlander, Hybrid Air Vehicles (HAV), bought back the airship without the military hardware. The United States had paid HAV nearly \$100 million to build the craft and HAV bought it back for only \$300,000.

Since then, HAV has raised money through crowdfunding, and through private investors. One investor is businessman Peter Hambro, and another is Bruce Dickinson, the lead singer of the heavy metal band Iron Maiden.

## **Airlander Has Multiple Potential Uses**

HAV Chief Executive Stephen McGlennan hopes to raise up to £30 million (\$39 million) more when he lists the company on the stock market later this year. He believes there could be 100 of the airships in the skies within five years, and says there is demand for about 1,000. The Airlander could be used for tourist pleasure cruises, cargo transport and disaster relief.

Other countries are also interested in the Airlander for military purposes, and are willing to spend money that the United States was not. "At first, 40 to 50 percent of its use will be military," McGlennan says.

The Airlander can stay airborne for weeks at a time, monitoring activity such as rebels planting explosives. The craft is easy to see, and McGlennan says that is the point. "It's about surveillance and keeping ground troops safe, but also about changing behaviors rather than catching people in the act," he says.

The Airlander can fly high enough to stay out of reach of all but specialized ground-to-air weaponry, so fighters shooting at it should not be a problem. "It doesn't pop," McGlennan says.

## **Talk Of Hindenburg Forbidden**

References to airship disasters such as the Hindenburg are not allowed at HAV. In May 1937, the German passenger airship LZ 129 Hindenburg caught fire and 36 people died. However, there is a historical link between the Airlander and a lesser-known tragedy. The huge hangars where the Airlander rests between flights once housed the ill-fated R101 that crashed in 1930, killing 48 of the 54 people on board.

The Airlander is much safer. It uses helium, an inert gas that will not explode, rather than hydrogen that the R101 and the Hindenburg used. Its shell is made from three layers of fabric, including Vectran, a material five times stronger than steel. HAV claims it can fly in high winds of up to 80 knots (92 miles per hour), and has a top speed of 100 miles per hour.

The Airlander might be huge, but it is also impressively graceful. With its maiden flight now safely completed, it could be flying over British towns regularly within a few years.

## Quiz

- 1 All four sentences given below help make the claim that the new Airlander has potential to help the U.S. military. Which of the following is the **STRONGEST** piece of evidence to support the claim?
- (A) The Airlander is the world's largest aircraft, at 92 meters (302 feet) long and 43 1/2 meters (143 feet) wide.
  - (B) The Airlander is also less expensive, with a price of £25 million (\$33 million), compared with £287 million (\$375 million) for an A380.
  - (C) The Airlander can stay airborne for weeks at a time, monitoring activity such as rebels planting explosives.
  - (D) It uses helium, an inert gas that will not explode, rather than hydrogen that the R101 and the Hindenburg used.
- 2 According to the article, the Airlander 10 is has more technologically advanced safety features than earlier similar aircraft models. Which paragraph **BEST** supports the idea outlined above?
- (A) The Airlander is the world's largest aircraft, at 92 meters (302 feet) long and 43 1/2 meters (143 feet) wide. It dwarfs the biggest airliner in the world, the Airbus A380 superjumbo. The Airlander is also less expensive, with a price of £25 million (\$33 million), compared with £287 million (\$375 million) for an A380. It can even carry 10 tons of weight, similar to military transport helicopters such as the Boeing CH-47 Chinook.
  - (B) The United States was a key player in getting the Airlander off the ground. The U.S. Air Force poured about \$300 million into the project and the military planned to use the airship to keep watch over battlefields, as it is capable of staying in the air for 21 days at a time, unmanned. However, when the U.S. government slashed military budgets in 2013, the Airlander was discontinued.
  - (C) The Airlander can fly high enough to stay out of reach of all but specialized ground-to-air weaponry, so fighters shooting at it should not be a problem. "It doesn't pop," McGlennan says.
  - (D) The Airlander is much safer. It uses helium, an inert gas that will not explode, rather than hydrogen that the R101 and the Hindenburg used. Its shell is made from three layers of fabric, including Vectran, a material five times stronger than steel. HAV claims it can fly in high winds of up to 80 knots (92 miles per hour), and has a top speed of 100 miles per hour.

- 3 Read the following paragraph from the section "Airlander Has Multiple Potential Uses."

*HAV Chief Executive Stephen McGlennan hopes to raise up to £30 million (\$39 million) more when he lists the company on the stock market later this year. He believes there could be 100 of the airships in the skies within five years, and says there is demand for about 1,000. The Airlander could be used for tourist pleasure cruises, cargo transport and disaster relief.*

How does the last sentence from the paragraph contribute to the development of the Airlander's significance?

- (A) The sentence suggests that the Airlander has multiple potential uses outside of the military.
- (B) The sentence suggests that the Airlander will generate a good profit for companies.
- (C) The sentence suggests that the Airlander will not be used for military purposes.
- (D) The sentence suggests that the Airlander will replace existing transportation aircraft.

- 4 Read the following paragraph from the section "Talk Of Hindenburg Forbidden."

*References to airship disasters such as the Hindenburg are not allowed at HAV. In May 1937, the German passenger airship LZ 129 Hindenburg caught fire and 36 people died. However, there is a historical link between the Airlander and a lesser-known tragedy. The huge hangars where the Airlander rests between flights once housed the ill-fated R101 that crashed in 1930, killing 48 of the 54 people on board.*

Why does the author include this paragraph in the article?

- (A) To detail the safety improvements that have been made on the Airlander aircraft.
- (B) To address the connection between the historic balloon aircraft and the new Airlander aircraft.
- (C) To compare and contrast the Airlander's safety features with the older, more dangerous aircraft in history.
- (D) To provide the current location where the new Airlander is housed.