

# World's longest aircraft to make UK flight

Originally sold to the U.S. Army, the *Airlander Hybrid Air Vehicle* – a huge helium airship as large as a football pitch – will be flown for the first time by its UK developers later this year

## HYBRID AIR VEHICLE (HAV)

**Skin:** Blend of Vectran, Kevlar and Mylar, developed for U.S. military to withstand small arms fire

Rear propulsor duct

Airship filled with non-flammable helium and air mixture at just above atmospheric pressure

Forward propulsor ducts

Bowthruster

Payload module

Fuel/freight module

Radar and communications payloads. HAV can be flown remotely or with two crew

## SPECIFICATIONS

|                 |           |
|-----------------|-----------|
| Length          | 92m       |
| Width           | 34m       |
| Endurance       | 21 days   |
| Payload         | 50 tonnes |
| Service ceiling | 6,000m    |
| Range           | 2,500km   |
| Top speed       | 150km/h   |

**FLIGHT CAPABILITY:** HAV gains lift from three different sources



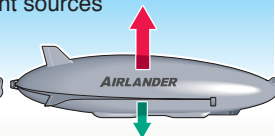
### 1 Aerodynamic lift

Generated by body hull shape



### 2 Vectored thrust

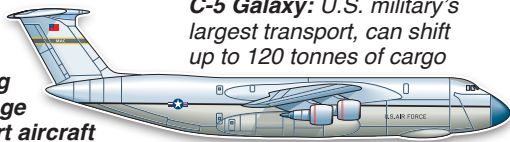
Four diesel engines, mainly used for take off and landing



### 3 Aerostatic lift

Generated by helium contained within craft

**With potential lifting capacity of up to 200 tonnes and ability to land anywhere, including on water, HAV has advantage over conventional transport aircraft**



**C-5 Galaxy:** U.S. military's largest transport, can shift up to 120 tonnes of cargo

Sources: Hybrid Air Vehicles, Northrop Grumman

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