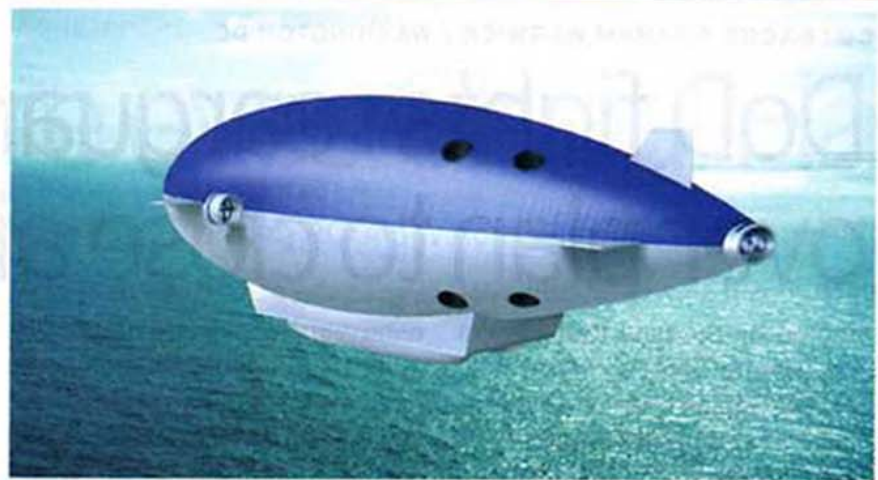


FLIGHT

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DARPA picks two for Walrus study

Aeros and Lockheed enter giant transport contest

Airship builder Aeros Aeronautical Systems and Lockheed Martin's Skunk Works have each been awarded approximately \$3 million study contracts for the first phase of the US Defense Advanced Research Projects Agency's (DARPA) Walrus programme to demonstrate technology for an ultra-large aircraft capable of carrying personnel and equipment from "fort to fight".

As conceived by DARPA, the Walrus is an aircraft carrier-sized heavier-than-air vehicle that would use a combination of aerodynamic lift, vectored thrust and gas buoyancy to carry a 500t payload 12,000nm (22,200km) in less than seven days.

The vehicle would operate without significant infrastructure from unimproved landing sites and deploy the components of

an army combat unit that can be ready to fight within six hours of disembarking.

The Walrus would be used for strategic lift between the continental USA and a theatre of operations, and for intra-theatre lift to move forces closer to the front line. The aircraft could also support sea-based operations and be used for missions requiring persistence, including mobile command and control, aerial refuelling and surgical facilities.

"This is not an airship," says programme manager Phil Hunt. The principal technical challenge of the programme is to demonstrate the capability to control lift at all times, in the air and on the ground, he says, including the ability to offload payload without taking on board ballast other than surrounding air.