Aeroscraft's

Dragon Dream

ML806

prototype

Aeros - *Aeroscraft* prototype, ML806 *Dragon Drea*m

Peter Lobner, updated 27 October 2025

1. Introduction

Igor Pasternak established a volunteer airship design bureau at Lviv Polytechnic University in Ukraine in 1981. His firm, Aeros, became one of the first private aerospace companies permitted under Mikhail Gorbachev's Perestroika reforms in 1986. In 1994, he relocated to the U.S. and established Worldwide Aeros Corp. (Aeros) in Montebello, CA with the goal of becoming a major manufacturer of lighter-than-air (LTA) craft in the U.S. The Aeros website is here: http://aeroscraft.com

In 2005, Aeros and Lockheed Martin were the two contractors selected by the Defense Advanced Research Projects Agency (DARPA) to conduct Phase I of Project WALRUS, which sought to develop new technologies and design concepts for a strategic, heavy-lift cargo airship. Lockheed Martin developed the P-791 hybrid airship prototype, which made its first flight in January 2006. Under its Phase I contract, Aeros developed a design concept for the ML806 *Dragon Dream* variable buoyancy airship that implemented a process they called "Control of Static Heaviness" (COSH) and also demonstrated its feasibility in a ground-based test rig. Project WALRUS was terminated in mid-2006, after completion of Phase I.

Work on a prototype variable buoyancy airship, known as the ML806 *Dragon Dream,* continued after Project WALRUS was terminated with additional funding under separate contracts. Under follow-on DARPA contracts, Aeros demonstrate a prototype flight-weight COSH system aboard a modified Aeros 40D blimp in 2008, and a subscale lightweight, rigid aerostructure 2009.

Funding under subsequent DARPA and NASA contracts enabled development of the ML806 *Dragon Dream* to be completed in a World War II-era blimp hangar at a former Marine Corps Air Station in Tustin, CA. After a successful float test inside the hangar on 3 January 2013,

Dragon Dream moved out of its hangar in July 2013 and made its first flight on 5 September 2013. One month into its flight test program, the *Dragon Dream* was damaged on 7 October 2013 when a section of the roof of its hangar collapsed and fell onto the airship. That was the end of prototype testing.

ML806 Dragon Dream outdoor taxi test on its air bearing landing system (ABLS). Source: Aeros (2013)

By this time, Aeros had compiled a patent portfolio addressing their key technologies for airship design, including the COSH flight system for a constant volume, variable buoyancy air vehicle, rigid aerostructures, and an air bearing landing system.

Building on their experience with the ML806 *Dragon Dream*, Aeros developed in parallel a family of COSH airship design concepts, known as *Aeroscraft*, that is scalable and configurable for a range of commercial, civil, military and private applications.

In 2024, Aeros unveiled their plans for developing a worldwide airborne freight and parcel delivery service network that employs all-electric versions of their variable buoyancy *Aeroscraft* airships (eVBAs), including a modernized ML806 configured as a parcel-carrying airship to complete the “last mile” of the logistics chain with the aid of deployable drones.

The Aeros *Aeroscraft* family of airships, including the eVBA models, are addressed in a separate article.

Current Aeros LTA products also include the non-rigid Aeros 40E *Sky Dragon* blimp and advanced tethered aerostat systems. Other notable Aeros LTA design concepts include the Global Rapid Redeployable (G2R) Stratospheric Airship and the Neona lenticular airship yacht. These are all addressed in separate articles.

2. Aeros patents

During the development of the *Dragon Dream* prototype, Aeros developed a portfolio of patents to address their key technologies, including the COSH flight system for a constant volume, variable buoyancy air vehicle, rigid airship external design, rigid aerostructure design, and an air bearing landing system (ABLS). Following is an overview of these patents.

2.1 Patent US9016622B1 – "Flight System for a Constant Volume, Variable Buoyancy Air Vehicle"

Patent US9016622B1, which was filed on 8 March 2012 and granted on 28 April 2015, describes Aeros' variable buoyancy technology known as "Control of Static Heaviness" (COSH).

> "The invention relates generally to the flight system for a constant volume, variable buoyancy air vehicle able to achieve vertical takeoff and landing utilizing lighter-than-air static lift principals and achieving forward flight by utilizing heavier-than-air dynamic lift principals. More particularly, this invention relates to a flight system combining an aerodynamically efficient hull filled with lifting gas and incorporating a system for controlling the pressure of a lifting gas in a constant volume envelope and the ability to adjust buoyancy by actively compressing or decompressing the lifting gas, with the resulting pressure differential being borne essentially by an internal pressure tank."
>
> "A low pressure system is required because only a low pressure system can compress lifting gas at high speed and in sufficiently large volumes for practical use."
>
> "The system for the compression and release of a lifting gas ….. wherein the one or more compressors are capable of compressing a lifting gas to a pressure up to 250 psi."

COSH is the variable buoyancy system implemented in the *Dragon Dream* prototype and in subsequent Aeros Aeroscraft airship designs.

The basic functional elements of Aeros' COSH system are shown in patent US9016622B1, Figure 10, which presents the following transverse view of an airship.

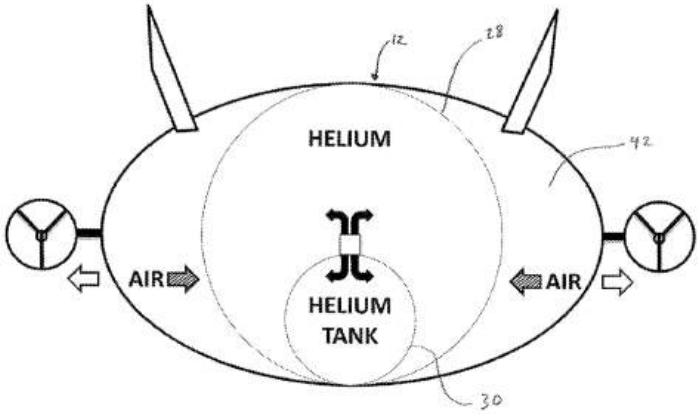


Fig. 10

Legend: *The COSH System (12) is comprised of atmospheric pressure helium lift gas cells (28) within the aeroshell, pressurized helium tanks (30), an helium pump / vent valve system that moves helium between the lifting gas cell and the high pressure tank (unnumbered), and an ambient air volume (42), which forms an expansion space within the aeroshell for the lifting gas cells (28).*

The operation of the COSH system is illustrated in the following Figures 8 and 9 from Aeros patent US9016622B1.

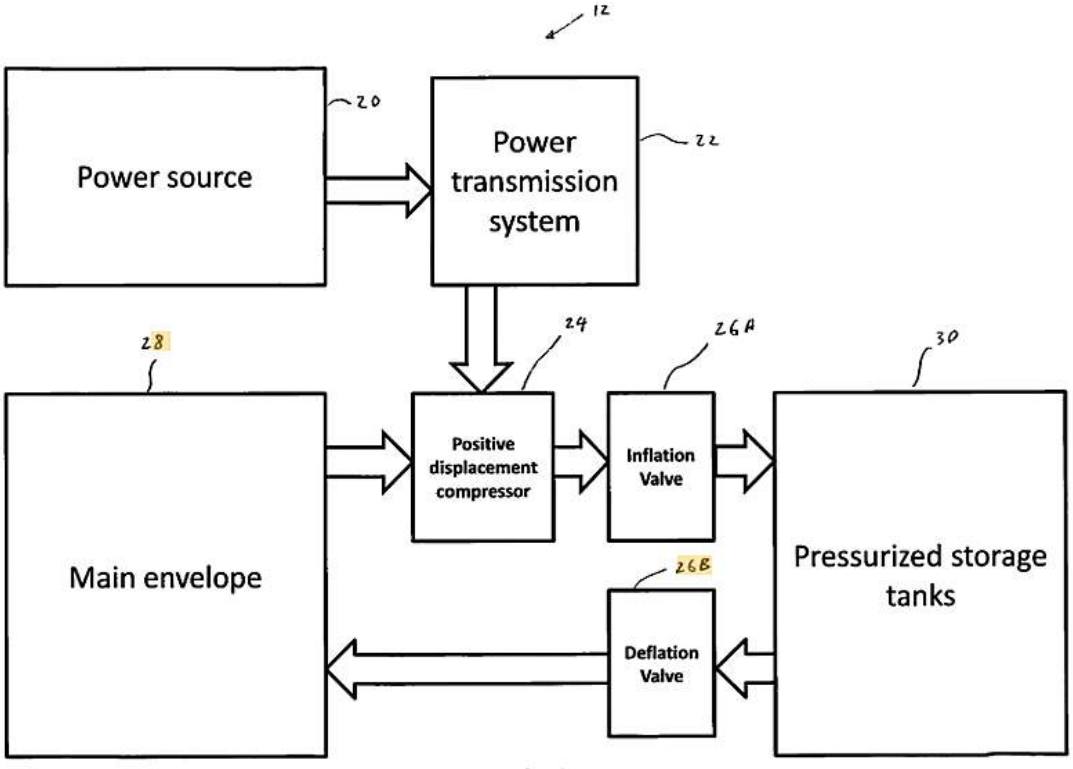
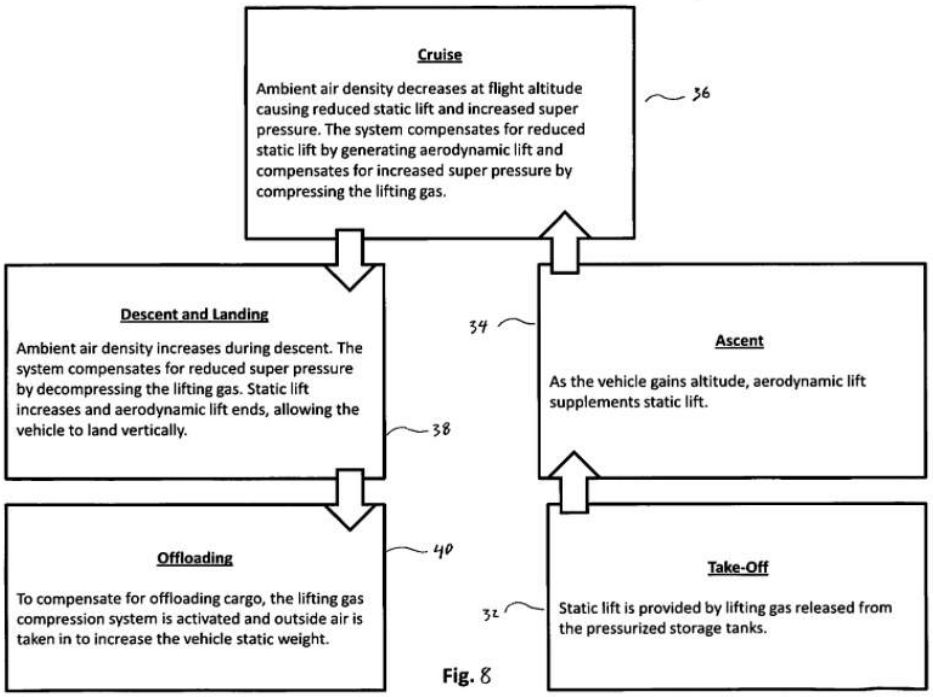


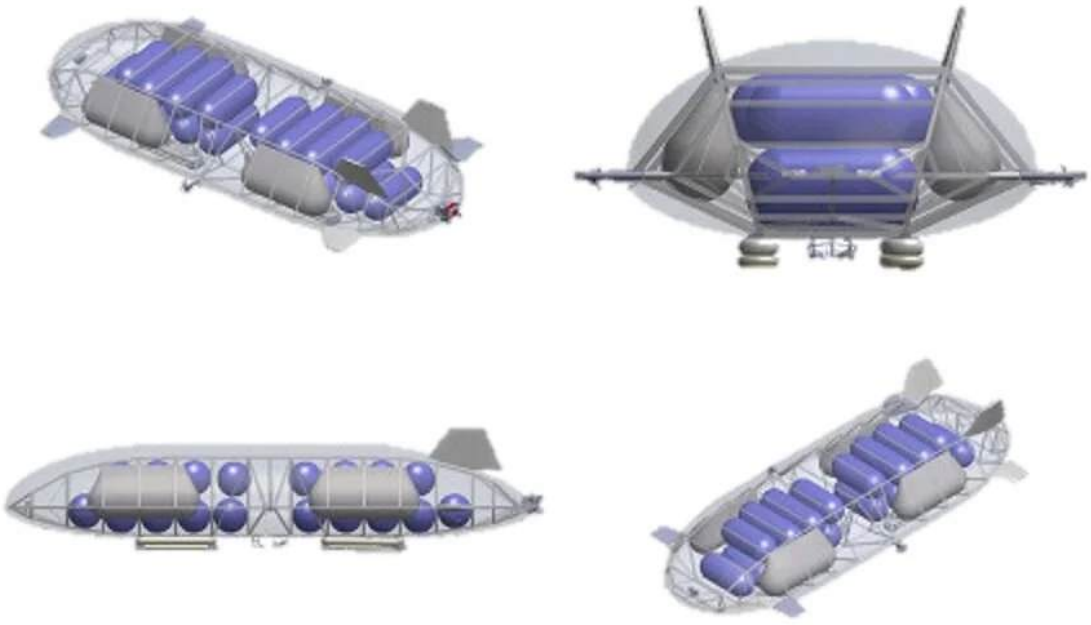
Fig. 9

Simple mechanical process for transferring helium back and forth between the main envelope and the pressurized storage tanks. Source: Patent US9016622B1, Fig. 9



Operation of the variable buoyancy system in different flight modes: takeoff, ascent, cruise, descent and landing, and off-loading cargo. Source: Patent US9016622B1, Fig. 8

Implementing patent US9016622B1 on the ML806 *Dragon Dream*



Cutaway drawings showing HPEs (blue) and AECs (grey). Source: Aeros

The airship's skin, which is attached to the aeroshell frame, forms the fixed volume, low leakage helium lift gas envelope. Within the helium envelope, the COSH system manages airship buoyancy using the Helium Pressure Envelopes (HPE, the blue tanks in the preceding diagrams) and Air Expansion Chambers (AEC, the grey bladders).

HPE cells inside the Dragon Dream hull. Source: Aeros

The COSH variable buoyancy system works as follows:

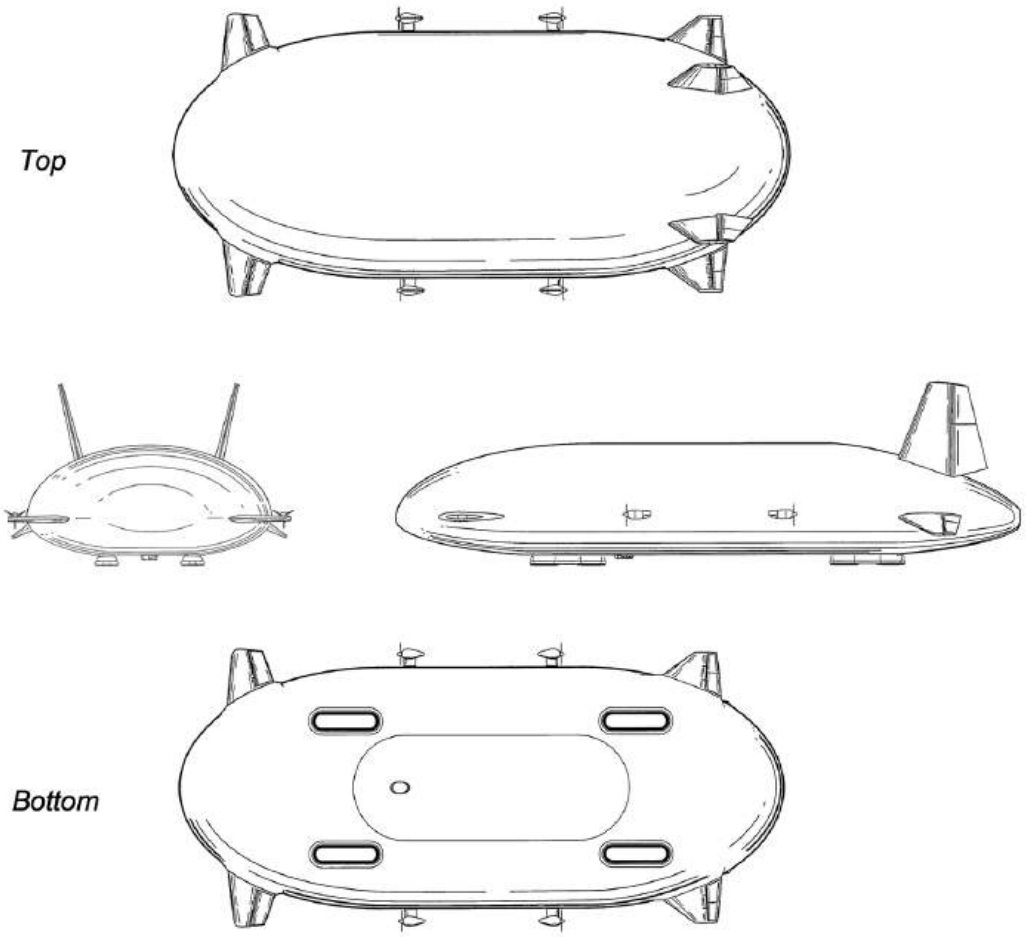
- **To reduce buoyancy**: The COSH system compresses helium from the helium envelope into the HPEs, which contain the compressed helium in a smaller volume and thereby reduce aerostatic lift. In addition, fans pump ambient air into the AECs, which expand and fill with heavier air ballast. The combined effect is to reduce overall buoyancy when desired.
- **To increase buoyancy:** The COSH system releases pressurized helium from the HPEs into the helium envelope. This creates a slight positive pressure that expands the helium envelope, causing the AECs to compress slightly and discharge some air ballast overboard. With reduced air ballast and greater helium lift, overall buoyancy of the airship is increased when desired.

Related patent

This Aeros COSH patent, US9016622B1, describes a process that seems to be functionally very similar to the density controlled buoyancy (DCB) process invented by Michael Walden and documented in patent US7156342B2, "Systems for actively controlling the aerostatic lift of an airship," which was granted several years earlier, on 2 January 2007, and assigned to LTAS Holdings LLC. This patent now is in the public domain.

2.2 Ornamental design patent - "Rigid body airship"

Patent USD663255S1, "Rigid body airship" was granted on 10 July 2012 and applies to the "ornamental design" of a rigid airship as defined in the following series of figures. The main visible features in the following 4-view drawing include a flattened ellipsoidal hull, fore and aft horizontal control surfaces, twin vertical stabilizers and rudders, flank-mounted propellers and an air bearing landing system.



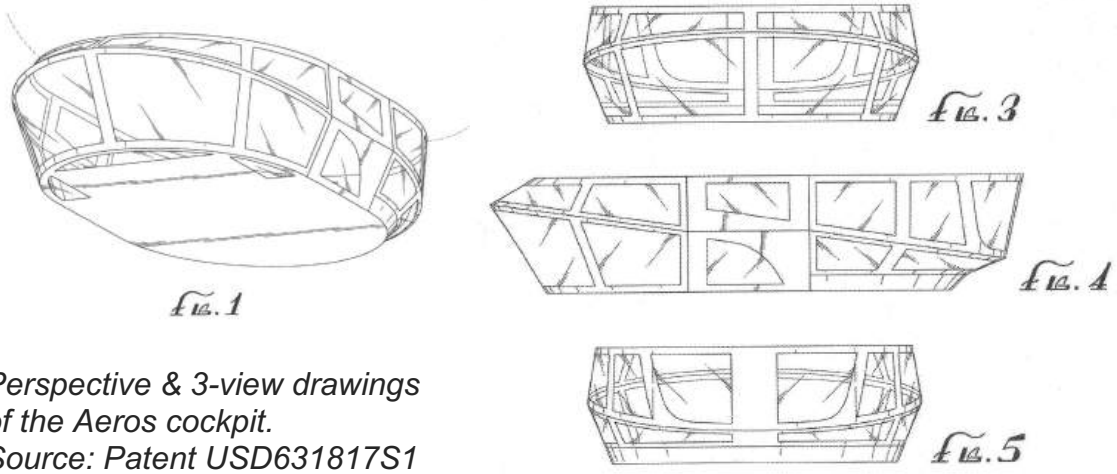
Generic 4-view drawing of an Aeros rigid body airship.
Source: Patent US D663255S1, Figures 1, 3, 5 & 6

Implementing patent USD663255S1 on the ML806 *Dragon Dream*

Variants of this basic external design are implemented in the ML806 *Dragon Dream* prototype and subsequent Aeros *Aeroscraft* designs.

2.3 Ornamental design patent - "Cockpit for hybrid air vehicle"

Patent USD631817S1, "Cockpit for hybrid air vehicle" was granted on 1 February 2011 and applies to the "ornamental design" of a cockpit located under the hull of the airship.



Perspective & 3-view drawings of the Aeros cockpit.
Source: Patent USD631817S1

Implementing patent USD631817S1on the ML806 *Dragon Dream*

The cockpit as installed on the *Dragon Dream* prototype closely resembles the patented design. Aeros' *Aeroscraft* airships do not use this cockpit design.

Installation of Dragon Dream cockpit. Source: Aeros

2.4 Patent US9266597B1 – “Aerostructure for rigid body airship”

Patent US9266597B1 describes the design of a rigid airship hull of the type implemented in Aeros’ *Dragon Dream* prototype and subsequent *Aeroscraft* airship designs. It was granted on 23 February 2016. The patent states:

> “An airship hull is provided that is sufficiently light and cost effective so as to make lifting body type airships practical vehicles for carrying people and cargo. The present invention hull design includes three main structural features, i.e., a rigid internal **main frame** which carries all primary moment and shear loads induced in the vehicle, the vehicle's **skin** which forms a semi-rigid barrier membrane for the lighter-than-air lifting gas, and a rigid **aeroshell frame** interposed between the main frame and the skin. The aeroshell frame and skin, in combination, are referred to as the **aeroshell**. The aeroshell carries the aerodynamic pressure loads induced on the airship”

> “A lift producing hull is highly advantageous because it allows an airship to take off in a statically negative condition, i.e., in a condition where the hull and payload weight exceed the maximum buoyancy supplied by the lifting gas.”

The rigid internal main frame is the lightweight, high strength truss structure built up from triangular section trusses shown in patent Figure 7. Carbon fiber/epoxy tubes in a range of sizes are combined with aluminum tubing (future airships are expected to use all-carbon tubing). Tubes are connected with aluminum joints and adhesive bondlines to prevent galvanic corrosion.

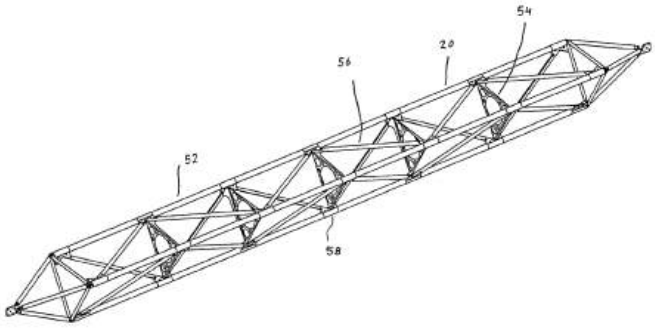


FIG.7

Patent Figure 2 shows a rigid internal main frame (12) comprised of 18 triangular-section trusses. Rectangular transverse truss structures (30) form bulkheads that join the sides of the main frame.

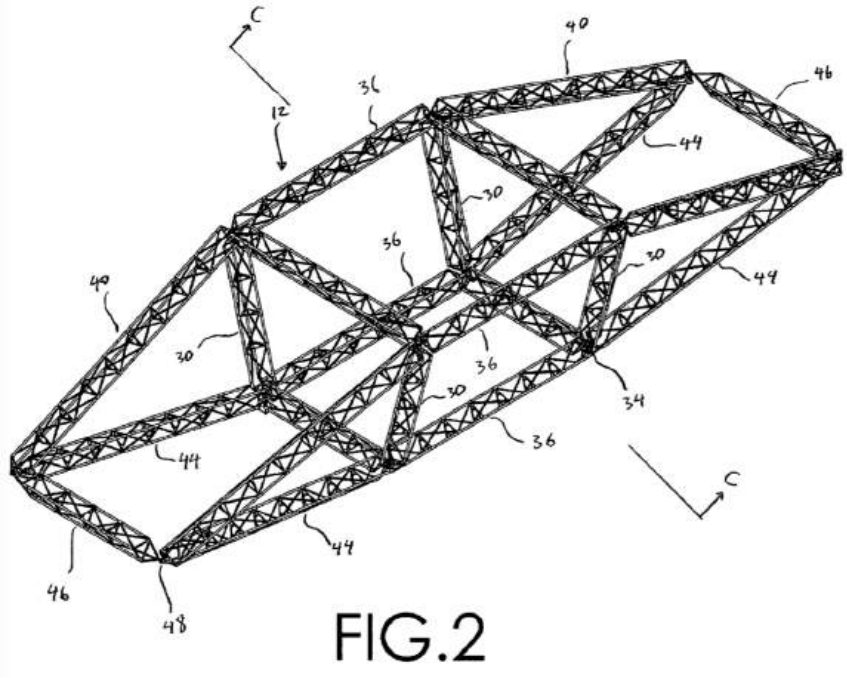


FIG.2

Patent Figure 6 shows the main frame truss structure with the tension cables (22) installed to provide the required structural rigidity.

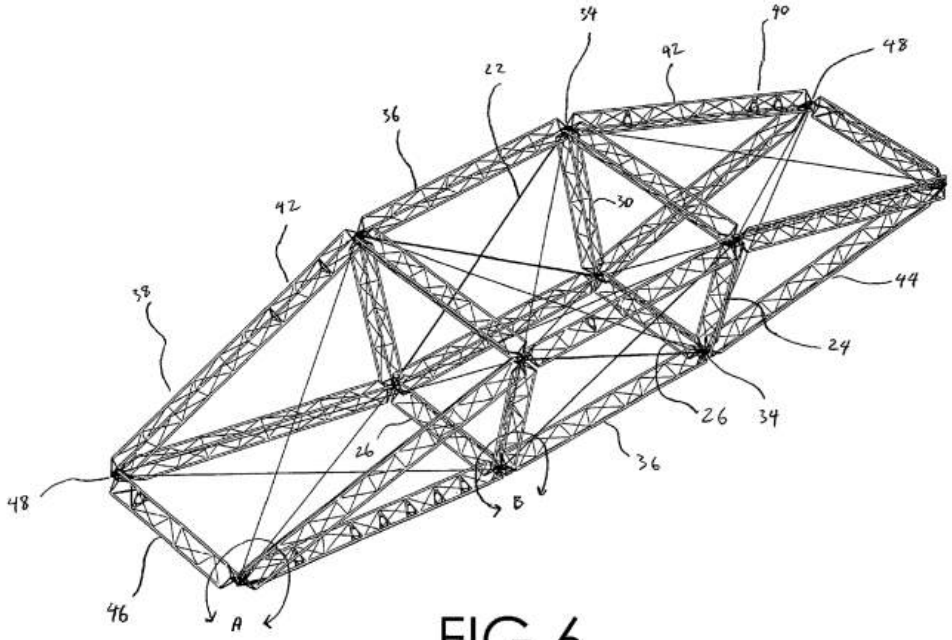


FIG.6

The rigid aeroshell frame (14) shown in patent Figure 3 defines the external shape of the airship. It is installed around, and is attached to, the internal main frame and is comprised of three sections: center (122), bow (118) and stern (120). Structural elements include longitudinal formers that define the highly curved surfaces of the bow and stern sections (90), ellipsoidal transverse ribs (92) and ellipsoidal longitudinal longerons (94).

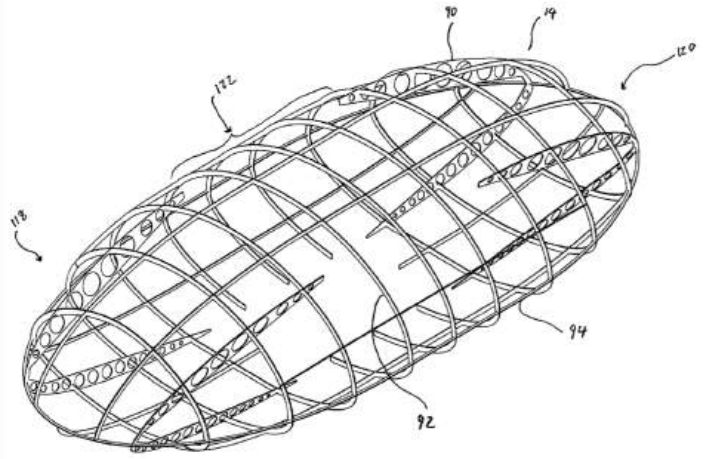


FIG.3

The fabric skin (16) shown in patent Figure 4 is a multi-layer, flexible membrane that is stretched over the aeroshell frame. It is comprised of four sections (142, 144, 146 & 148) for ease of assembly.

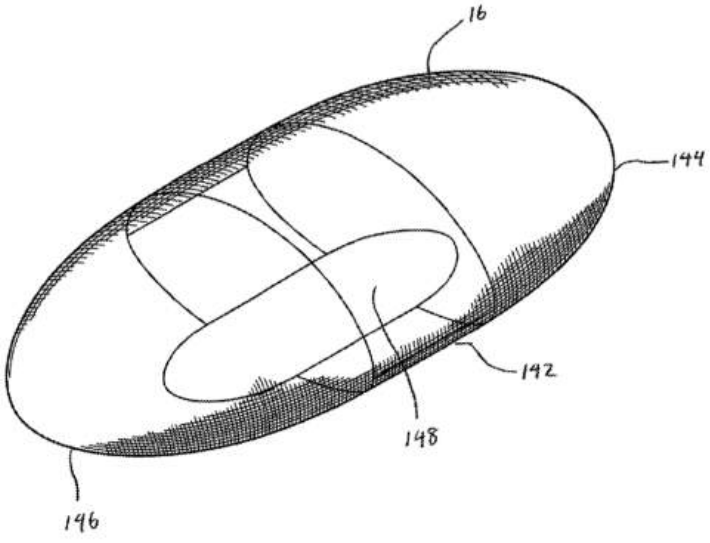
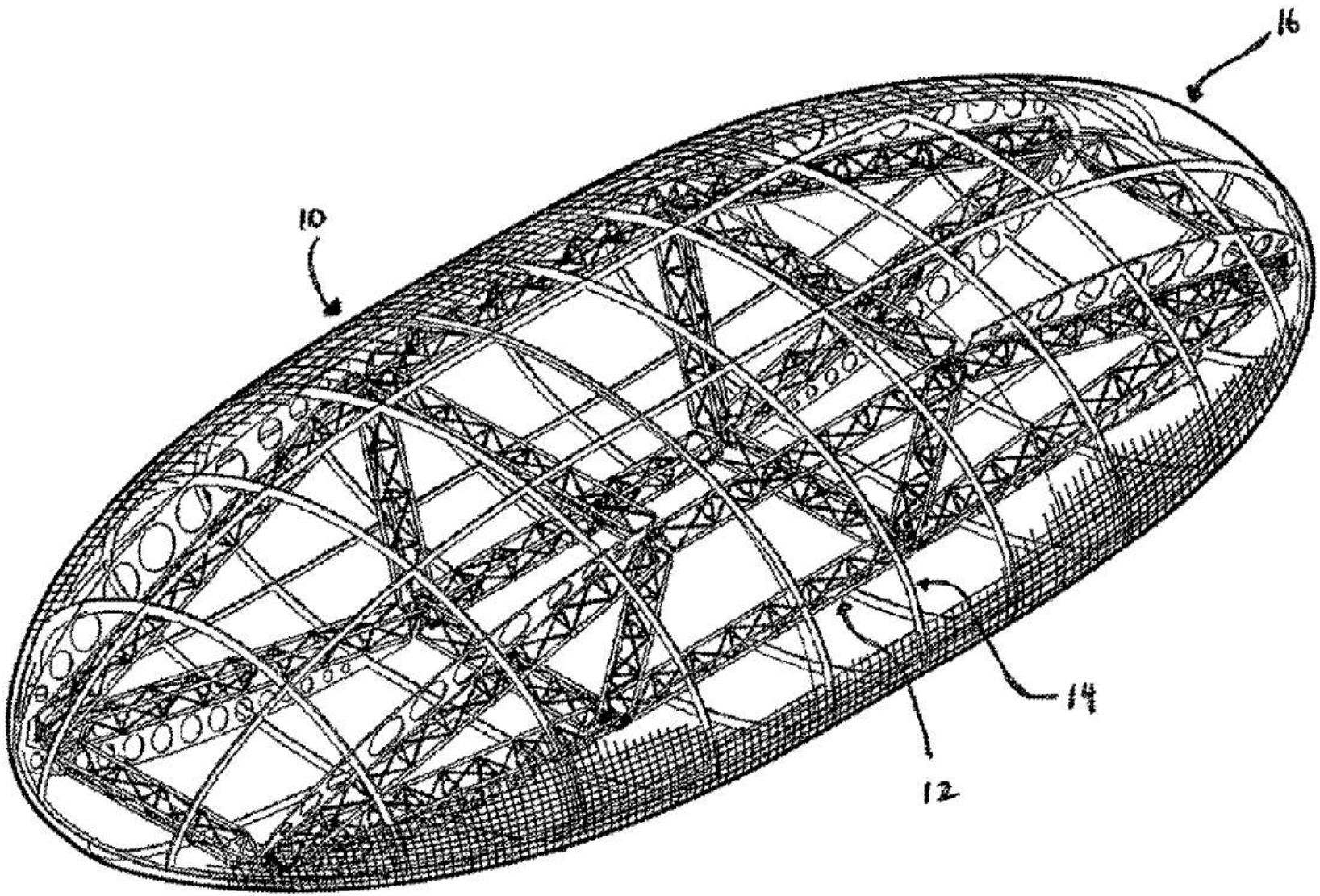


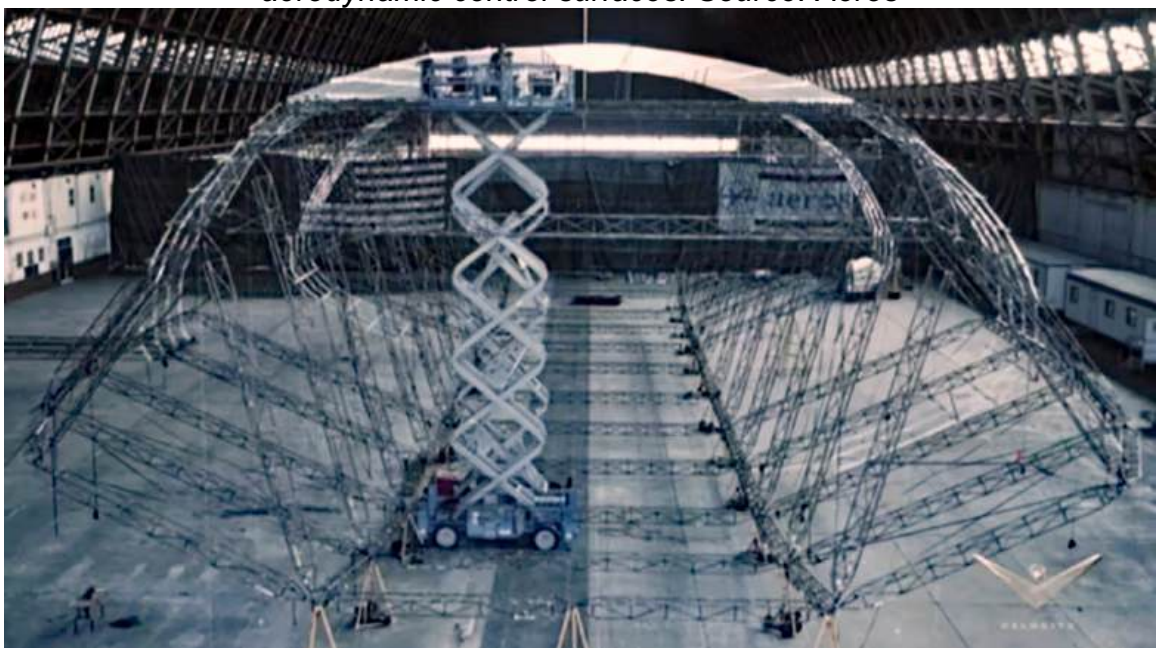
FIG. 4



The complete rigid hull (10) is comprised of the internal main frame (12), the aeroshell frame (14) and the skin (16). Source: US9266597B1, Fig 1.

Implementing patent US9266597B1 on the ML806 *Dragon Dream*

The Dragon Dream's lightweight, rigid main frame, which supports the airship's COSH equipment, its cockpit, cargo, cargo containment structures and aerodynamic control surfaces. Source: Aeros



Transverse view of the main frame.
Source: Screenshot from Aeros press release video, 22 Oct. 2025.

The ML806 Dragon Dream's assembled lightweight, rigid aeroshell frame is installed around the internal main frame.
Source: Aeros

The completed ML806 Dragon Dream with the lightweight skin installed over the rigid aeroshell frame.
Source: Aeros

2.5 Patent US8864068B1 – “Multi-chamber landing system for an air vehicle”

Patent US8864068B1, granted on 21 October 2014, defines a lightweight, multi-chamber, air bearing landing system (ABLS) that provides an air cushion that helps absorb and redistribute energy during vertical takeoff and landing of an airship and supports the vehicle’s weight when maneuvering on the ground or parked. The ABLS also can provide suction to increase the vehicle's stability while on the ground. The system can adjust the attitude of an airship on the ground to enable the airship to clear obstacles while taxiing on uneven ground and to facilitate loading and unloading.

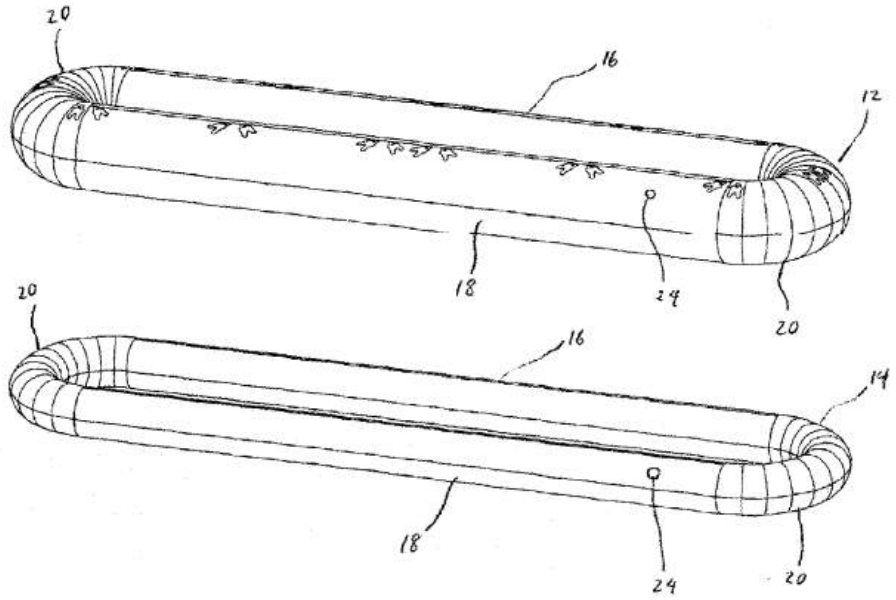


Fig. 5b

Legend: *Load-bearing upper (12) and lower (14) air chambers, each comprised of cylindrical center sections (16, 18) and semicircular end pieces (20), all manufactured from a high-density fabric (24)*

Simplified exploded view of an ABLS module showing just the upper and lower air chambers. Source: US 8864068B1, Fig 5b.

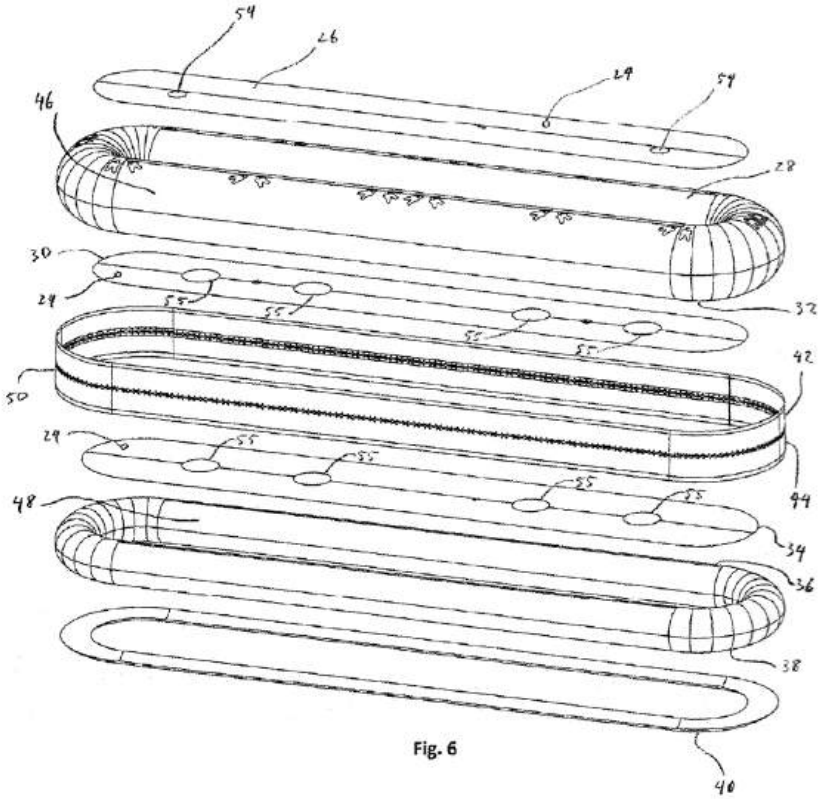


Fig. 6

Legend: *Load-bearing upper (28, 32 & 46) and lower (36, 38 & 48) air chambers, ABLS top cover (26) is bonded to the top surface of the upper chamber (28), debris shield with air ports (30) is bonded to the bottom surface of the top chamber (32), another debris shield with air ports (24) is bonded to the top surface of the lower chamber (36), an abrasion-resistant coating (40) on the bottom surface of the lower chamber. Upper and lower curtains (42, 44) around the periphery of the air chambers are joined by tension cords (50) that allow a degree of flexing between the upper and lower air chambers.*

Detailed exploded view of an ABLS module. Source: US8864068B1, Fig 6

Implementing patent US8864068B1 on the ML806 *Dragon Dream*

The ABLS is implemented on the ML806 *Dragon Dream* prototype and on subsequent *Aeroscraft* designs.

Four ABLS modules as installed under the ML806 Dragon Dream's aeroshell. This view is during the indoor airship float test in January 2013. Source: Aeros

3. Proof-of-concept of variable buoyancy control

In 2005, Aeros and Lockheed Martin were the two contractors selected by the Defense Advanced Research Projects Agency (DARPA) to conduct Phase I of Project WALRUS, which sought to develop new technologies and design concepts for a strategic, heavy-lift cargo airship. Under its $3,267,000 Phase 1 contract, Aeros successfully demonstrated the operation of their COSH variable buoyancy system in a ground-based test rig in 2006. Project WALRUS was terminated in mid-2006, after completion of Phase I.

Under a follow-on DARPA contract issued in October 2007, Aeros modified an Aeros 40D Sky Dragon non-rigid airship by installing two inflatable collars that were controlled by an on-board, flight-weight, prototype COSH system. Aeros announced on 17 July 2008 that a successful flight test of the modified Aeros 40D validated the operation of COSH. Aeros CEO Igor Pasternak explained, “We want to demonstrate we can change the static heaviness enough in a short time to be operationally acceptable.”

Modified Aeros 40D with two inflatable collars for the COSH system. Source: (Above) Aeros, (Below) screenshot from Aeros video.

4. Proof-of-concept of lightweight rigid aerostructure design

In September 2008, Aeros was awarded a DARPA contract for a Buoyancy Assisted Lift Vehicle (BAAV) Rigid Aerostructure Technology Demonstration. Under this contract, Aeros built a complete sub-scale aerostructure based on patent US9266597B1 to validate that a full-scale airship with the same rigid aerostructure design could be both light and strong enough to accommodate high-speed dynamic air loads without failure. Aeros announced successful completion of the BAAV program on 10 September 2009.

Aeros built this sub-scale Dragon Dream aerostructure under the BAAV program. Source: Aeros

5. The ML806 *Dragon Dream* prototype airship

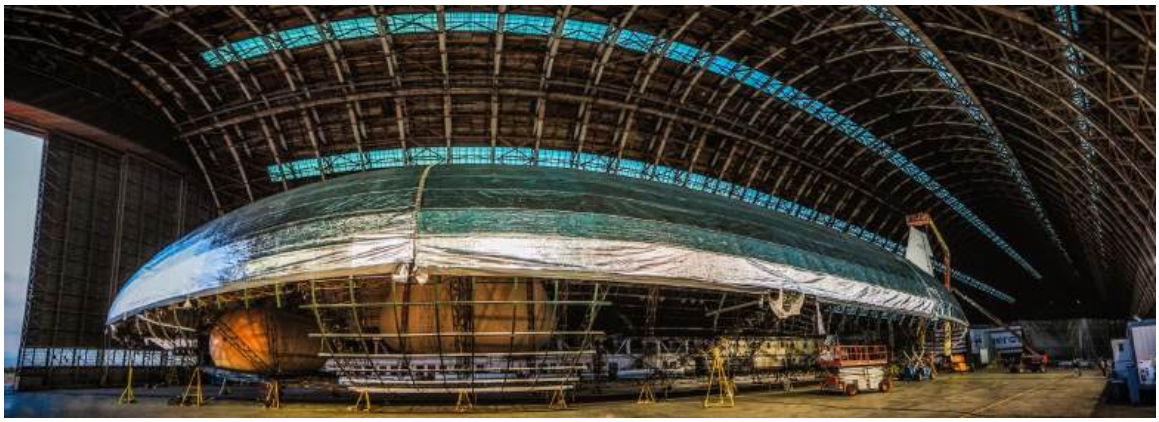
Following the successful proof-of-concept demonstrations, Aeros was awarded a $60 million DARPA contract in 2011 for Project Pelican. Under this contract, Aeros developed their half-scale, proof-of-design vehicle named ML806 *Dragon Dream*, which embodied the following design features that also are incorporated on later *Aeroscraft* airships.

- **Control-of-static-heaviness (COSH) system** for variable buoyancy control. As installed in *Dragon Dream*, the system was expected to vary the airship's buoyant lift by 1,361 to 1,814 kg (3,000 to 4,000 lb).
- **Rigid structure** with hard points for mounting the cockpit, propulsion system, aerodynamic control surfaces, and the cargo compartment.
- **Ceiling suspension cargo deployment system** for managing cargo with minimal requirements for ground support infrastructure. This system supports cargo containers and pallets from rails in the ceiling of the cargo compartment and adjusts cargo positioning to accommodate changes in center of gravity, such as when other cargo is loaded or unloaded.
- **Air bearing landing system (ABLS)** for operation on unimproved surfaces, including ice and water. Airflow in the system can be reversed to provide a suction to grip the ground for added stability.
- **Vectored thrust engines** propel the vehicle in all modes of operation (cruise, VTOL, hover, taxi) and enable low-speed flight maneuverability.
- **Low-Speed Control (LSC) system** manages the engines and maintains airship position, altitude and orientation during VTOL and hover in low wind conditions.

General characteristics of the Aeros ML806 *Dragon Dream*

Parameter	***ML806 Dragon Dream***
Type	Rigid, fixed volume, variable buoyancy
Length	81.1 m (266 ft)
Width, max	29.3 m (96 ft), wingspan Actual body width - see below
Height, max	15.7 m (51 ft)
Volume	17,000 m^3 (600,000 ft^3)
Gross weight	16,329 kg (36,000 lb)
Propulsion & low-speed control	• 2 x engine-driven, flank-mounted thrust vectoring propellers • 1 x engine-driven, stern mounted, three-bladed, fixed propeller with thrust vectoring paddles in the propeller slipstream providing left/right and up/down thrust deflection
Speed, cruise	40 knots (46 mph / 74 kph)
Operating altitude	2,987 m (9,800 ft)
Crew + pax accommodations	Midships gondola mounted under the hull, 2 x flight crew + 2 to 3 passengers

96ft is the actual body width based on rough image dimensions
"Aeroscraft Dragon Dream 4" image in the Dragon Dream image directory



ML806 Dragon Dream was assembled in a World War II-era blimp hangar at the former Marine Corps Air Station in Tustin, CA, which was under license to the Navy. In the above photo, the aeroshell frame and skin on the lower half of the airship are not completely installed, revealing some internal features. Note the rigid aeroshell framing, transverse pressurized helium tanks (orange) and an air expansion volume. Source: Aeros via LinkedIn

In the above photo, the skin on the lower half of the airship is not installed. Note the attachment of a canard control surface to the rigid aeroshell framing. Source: Aeros

(*Above) Flank-mounted thrust-vectoring engine with 3-bladed propeller positioned for cruise (L) and VTOL / hovering (R).*

(Right) Stern-mounted, fixed engine with 3-bladed propeller and thrust-vectoring "paddles" in the propeller slipstream positioned for left/right thrust deflection.

(Above) Stern-mounted, propeller slipstream deflector, side view (L), and stern view with deflectors "closed" for up/down thrust deflection (R).

Source, five photos: Aeros

6. Testing the *Dragon Dream* prototype

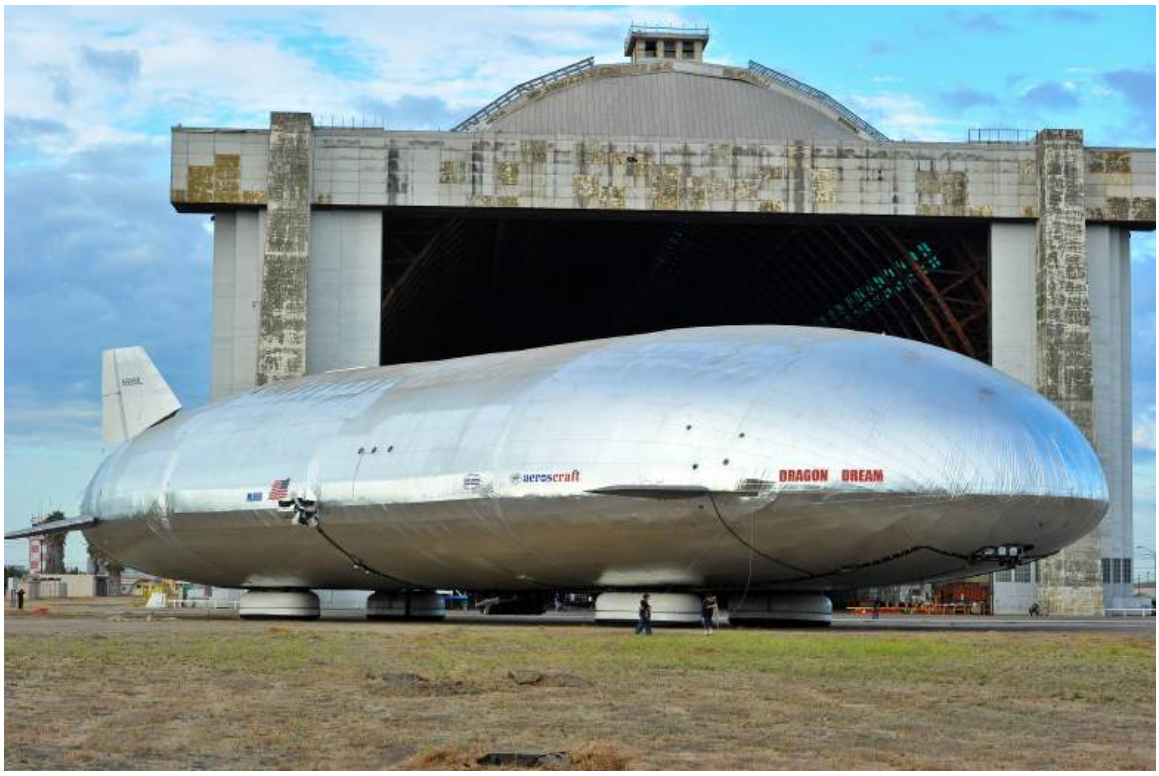
Dragon Dream was first "float tested" on 3 January 2013. Shortly thereafter, the Pentagon declared that the hangar tests of the *Dragon Dream* were a success, with the craft meeting its demonstration objectives, which were to confirm the operation of the COSH system.

ML806 Dragon Dream's first "static float test" on 3 January 2013. Source: Aeros

ML806 Dragon Dream parked in its Tustin hangar.

The airship was moved out of its hangar on 4 July 2013. Outdoor taxi tests on the air bearing landing system, COSH tests, and low speed control (LSC) system tests were conducted. DoD and NASA acknowledged that work under Project Pelican was completed within budget on 21 August 2013.

ML806 Dragon Dream on its ABLS moving outside the hangar in July 2013. Source, both photos: Aeros



ML806 Dragon Dream moved outside the hangar in July 2013.
Source: REX/Aeros via Daily Mail

Taxi test on the ABLS, July 2013. Source: Aeros

The *Dragon Dream's* cockpit, based on the Aeros design in patent USD631817S1, is located under the hull, approximately in line with the mid-ships, flank-mounted propellers.

Gondola side view. Source: Screenshot, The New Yorker video

Cockpit interior view. Source: Aeros

External view of cockpit during taxi on ABLS.
Source: Screenshot, Aeros video.

On 31 August 2013, Aeros was granted an FAA Experimental Airworthiness Certificate for the purpose of operating the ML806 *Dragon Dream* at low altitude within designated controlled airspace for the purpose of research and development. This allowed Aeros to conduct integration testing of vehicle subsystems and evaluate vehicle performance in flight. *Dragon Dream* made its first flight on 11 September 2013.

Part of the Aeros flight test support team at their stations.

ML806 Dragon Dream flight test, September 2013.
The cockpit is visible amidships, under the gas envelope.
Source, both photos: Aeros

ML806 Dragon Dream flight test, bow view, September 2013.
Source: Aeros

ML806 Dragon Dream flight test, profile view, September 2013.
Source: Screenshot from Spike Jacobs YouTube video (2013)

ML806 Dragon Dream flight test, September 2013.
Source, both photos: Aeros

Aeros reported that the test program accomplished all of its objectives, with the airship achieving the desired system performance, successfully demonstrating VTOL, hover, and transition to level flight, ground maneuvers using the ABLS, and COSH system operation, including demonstration of buoyancy control during payload off-loading.

Two months into its flight test program, the *Dragon Dream* airship was damaged on 7 October 2013 when a 6-by-6 meter (20-by-20 foot) section of the roof of its World War II-era hangar collapsed and fell onto the airship. Aeros determined that the airship was not repairable, thus ending the flight test program.

Part of the central roof of the North Tustin blimp hangar collapsed.
Source: Associated Press via Daily Mail

Damage to the rear part of the ML806 Dragon Dream.
Source: Allan Ripp via The LTA Society

The undamaged front part of the ML806 Dragon Dream
after the roof collapse. Source: ZUMAPRESS via Daily Mail

7. *Dragon Dream* prototype post mortem

The General Accounting Office (GAO) reported that $42.4 million had been spent in *Dragon Dream* under Project Pelican between FY2008 and FY2011 (Oct 2007 - Sep 2011). Aeros also received DARPA funding under the separate BAAV (2008 - 2009) and COSH (2007 - 2008) proof-of-concept contracts and $3.267 million under the WALRUS Phase 1 contract (2005 – 2006).

Aeros disassembled the damaged airship and salvaged what it could. In 2015, Aeros filed a lawsuit (Case No. CV15-1712-PJW) in the U.S. District Court for the Central District of California against the Navy related to the loss of *Dragon Dream* and its impact on future Aeros business. The lawsuit was settled on 20 November 2017 with a ruling in favor of Aeros with a determination that they were entitled to damages in the amount of $6,882,918.

The Aeros *Aeroscraft* family of airships, which incorporate key technologies demonstrated by *Dragon Dream,* is addressed in a separate article.

8. For more information

- "Contractors For Walrus Program Announced," Defense Aerospace.com, 26 August 2005: http://www.defense-aerospace.com/articles-view/release/3/62266/darpa-awards-walrus-contracts-(aug-29).html
- Lin Lao & Igor Pasternak, "A review of airship structural research and development," Progress in Aerospace Science, Vol. 45, Issues 4 – 5, pp. 83 – 96, May – July 2009: https://www.sciencedirect.com/science/article/abs/pii/S0376042109000153
- Report to Congress, "Summary Report of DoD Funded Lighter-Than-Air-Vehicles," DoD Office of the Assistant Secretary of Defense for Research and Engineering, 1 November 2012: https://www.hsdl.org/?view&did=728733
- "Aeroscraft heavy lift airship makes first float test," Nova Celestica, 31 January 2013: https://novacelestica.blogspot.com/2013/01/aeroscraft-heavy-lift-airship-makes.html

- “Dragon Dream passes government tests,” HeavyLiftPFI, 22 August 2013: https://www.heavyliftpfi.com/business/dragon-dream-passes-government-tests/5659.article
- “Aeroscraft Prototype Successfully Passes All Pentagon and NASA Tests under ‘Project Pelican’ Program,” PRWeb press release via LighterThanAirSociety, 23 August 2013: https://www.blimpinfo.com/uncategorized/aeroscraft-prototype-successfully-passes-all-pentagon-and-nasa-tests-under-project-pelican-program/
- “Aeros Announces Aeroscraft ‘Dragon Dream’ Flight Test Crew,” PRWire, 28 August 2013: https://www.prweb.com/releases/2013/8/prweb11068358.htm
- “Aeros Granted Airworthiness Certificate by FAA for Purpose of Research and Development,” Aeros press release via Cision PRWeb, 6 September 2013: https://www.prweb.com/releases/aeros_granted_airworthiness_certificate_by_faa_for_purpose_of_research_and_development/prweb11092486.htm
- Jeff Collins, “Prototype airship nears first test flight,” The Orange County Register, 8 September 2013: https://www.ocregister.com/2013/09/08/prototype-airship-nears-first-test-flight/
- Joshua Gardner, “Revolutionary $35M airship damaged as the roof of its World War II era military hangar collapses,” Daily Mail, 7 October 2013: https://www.dailymail.co.uk/news/article-2449286/Revolutionary-35M-airship-damaged-roof-World-War-II-era-military-hangar-collapses.html
- Sara Black, “Don’t call it a blimp!” Composite World, 30 April 2014: https://www.compositesworld.com/articles/dont-call-it-a-blimp
- Melody Petersen, “Airship dedication reminds Worldwide Aeros chief of deferred dream,” Los Angeles Times, 17 October 2014: https://www.latimes.com/business/la-fi-airship-dedication-20141018-story.html
- Perry Chiaramonte, “Lawsuit Filed Against Navy for Destroyed Experimental Airship, The Lighter-Than-Air-Society, 12 March 2015: https://www.blimpinfo.com/airships/lawsuit-filed-against-navy-for-destroyed-experimental-airship/

- Courtney Howard, “Aeros patents cargo airship technology,” Intelligent Aerospace, 12 May 2015: https://www.intelligent-aerospace.com/military/article/16538488/aeros-patents-cargo-airship-technology
- “Aeros Aeronautical Systems Corp. v. U.S.” Case No. CV 15-1712-PJW, Leagle, 20 November 2017: https://www.leagle.com/decision/infdco20171121909#

Patents

- USD631817S1, “Cockpit for hybrid air vehicle,” Inventor: Igor Pasternak, Sungyen Chen & Eugene Nemirovsky, Filed 26 April 2010, Granted 1 February 2011, Assigned to: Worldwide Aeros Corp.: https://patents.google.com/patent/USD631817S1/en
- USD663255S1, “Rigid body airship,” Inventor: Igor Pasternak, Filed 2 August 2011, Granted 10 July 2012, Assigned to: Worldwide Aeros Corp.: https://patents.google.com/patent/USD663255S1/en
- US8864068B1, “Multi-chamber landing system for an air vehicle,” Inventor: Igor Pasternak, Filed 2 April 2012, Granted 21 October 2014, Assigned to Worldwide Aeros Corp.: https://patents.google.com/patent/US8864068B1/en
- US9016622B1, “Flight system for a constant volume, variable buoyancy air vehicle,” Inventor: Igor Pasternak, Filed 8 March 2012, Granted 28 April 2015, Assigned to: Igor Pasternak: https://patents.google.com/patent/US9016622B1/en
- US9266597B1, “Aerostructure for rigid body airship,” Inventor: Igor Pasternak, Eugene Nemirovsky & Mansoor Kouchak, Filed 1 August 2011, Granted 23 February 2016, Assigned to Worldwide Aeros Corp.: https://patents.google.com/patent/US9266597B1/en

Videos

- “Aeros - Aeroscraft Heavy-Lift Air Vehicle First Float Maneuver + Cargo Delivery Simulation,” (1:47 min), posted by arronlee33, 23 January 2013: https://www.youtube.com/watch?v=XYr10KIapqU
- “Aeroscraft Dragon Dream air cargo ship 1st flight,” (1:51 min), posted by Big Chris, 31 August 2013: https://www.youtube.com/watch?v=L95wkPmWePg

- “Dragon Dream airship first flight,” (2:23 min), posted by Spike Jacobs, 11 September 2013: https://www.youtube.com/watch?v=GcJZiMhkw9Y
- “Dragon Dreams' First Flight,” (1:31 min), posted by WorldwideAeros, 17 December 2013: https://www.youtube.com/watch?v=WjQ8PL1Y6SU&t=6s
- “AEROSCRAFT - World's Most Advanced Airship First Flight Commercial,” (2:44 min), posted by CarJamTV, 10 July 2014: https://www.youtube.com/watch?v=8b-qBoFku_o
- “Aeroscraft airship Dragon Dream Roll out,” (0:25 min), Aeros video posted by 42 – Everything About Earth and Beyond, 2015: https://www.dailymotion.com/video/x2fgnub
- “Inventing a Lighter-Than-Air Aircraft,” (5:50 min), posted by The New Yorker, 21 February 2016: https://www.youtube.com/watch?v=QwLa24BO7oI
- Short video clip of COSH system test during *Dragon Dream’s* first test flight in 2013, (1:07 min), posted by Aeros, 16 August 2024: https://www.instagram.com/reel/C-vWJ1zvM7-/

Other *Modern Airships* articles

- *Modern Airships - Part 1*: https://lynceans.org/all-posts/modern-airships-part-1/
    - Aeros - Aeroscraft variable buoyancy rigid airships
    - DARPA - Project WALRUS
    - Lockheed Martin – P-791 hybrid airship prototype
    - Walden Aerospace / LTAS - variable buoyancy rigid airships
- *Modern Airships - Part 2*: https://lynceans.org/all-posts/modern-airships-part-2/
    - Aeros – Aeros 40 *Sky Dragon* blimp
    - Atlas LTA Advanced Technology – ATLANT variable buoyancy rigid airships
    - Euro Airship – variable buoyancy rigid airships
    - Varialift - ARH50 & ARH 250 variable buoyancy rigid airships
- *Modern Airships - Part 3*: https://lynceans.org/all-posts/modern-airships-part-3/
    - Aeros - *Neona*
    - Halo luxury airship