

Hybrid Enterprises, exclusive reseller for Lockheed Martin's 20-ton capacity **hybrid airship**, LMH-1, announced at the June Paris Air Show that it would start taking orders for delivery as early as 2018. Lockheed said it has completed all required FAA certification planning steps and is ready to begin construction of the first commercial model at its Palmdale, California, facility.

Russia's **Augur RosAeroSystems**, makers of the AU-30 blimp (payload 1/2 ton) intends to complete the first phase of development of its hybrid cargo-and-passenger airship — Atlant-30 (capacity 16 tons) — by December, with tests of a prototype to follow. A larger version, Atlant-100, would carry 60 tons.

TCOM and Logos Technologies demonstrated the capabilities of Logos' Simera wide area motion imagery sensor combined with a TCOM 12M Tactical Aerostat. Targets of interest were located and tracked in real time over a city-sized area, from the system's 360-degree field of view. In October a TCOM aerostat, part of Raytheon's JLENS missile defense system, broke free from its moorings at the Aberdeen Proving Ground and drifted some 150 miles before coming down in rural Pennsylvania. The program has been suspended, pending Army review.

This year, **Goodyear** celebrated 90 years of using airships for advertising, including 60 years of aerial broadcasting. In August, Goodyear retired its GZ-20 blimp, Spirit of America, based in Carson, California, which has carried 30,280 passengers on 8,005 flights since 2002. It will be replaced first by its twin sister, Spirit of Innovation, followed two years later by one of Goodyear's new Zeppelin NT semi-rigids.

The U.K.'s Hybrid Air Vehicles (HAV) continued to reassemble its 92-meter-long Airlander 10 hybrid airship at its Cardington Hangar in England. The craft was formerly part of the U.S. Army's Long Endurance Multi-Intelligence Vehicle program, and has now been reclassified as a civil aircraft. In 2015 HAV raised money to return it to flying condition, the funds coming from a variety of sources, including \$3.4 million from crowdfunding. The company's workforce has increased to 90 as it prepares for a civil flight

test program under the direction of the European Aviation Safety Agency. **Airlander 10** is scheduled to fly in the first half of 2016.

In August, Zeppelin Luftschifftechnik GmbH celebrated carrying its 200,000th Zeppelin NT passenger. In the U.S., Goodyear is assembling the second of three NT Zeppelins it ordered in 2001. The craft's first flight is scheduled for spring 2016.

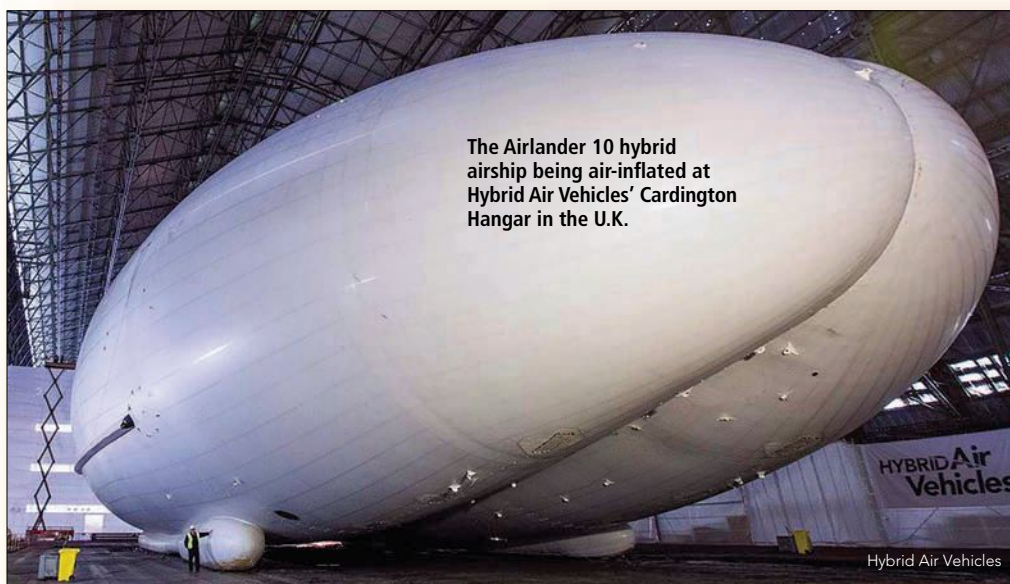
At Aeros Corp. in Los Angeles, design, testing and other development work continues on the ML866 (66-ton payload) **Aeroscraft**. The craft uses a recently patented proprietary buoyancy-control system that allows for vertical takeoff or landing at maximum payload without using external ballast. In March the company sued the U.S. Navy for damage sustained by its Dragon Dream prototype, when the roof of a Navy-owned hangar partially collapsed.

Airship do Brasil, a Brazilian manufacturer of blimps, balloons and other lighter-than-air technology, has made its long-term priority the development of a "classical con-

Commercial hybrid airships prepare to get airborne

by Alan Farnham

The Lighter-Than-Air-Systems Technical Committee stimulates development of knowledge related to airships and aerostats for use in a host of applications from transportation to surveillance.



The Airlander 10 hybrid airship being air-inflated at Hybrid Air Vehicles' Cardington Hangar in the U.K.

cept" airship of 30-ton capacity, the ADB 3-30. Applications would include the inspection, maintenance and replacement of electric transmission lines in the **Amazon**. In March the company inaugurated a new headquarters in São Carlos, including a new hangar. It plans to have an intermediary airship, the 50-meter long ADB 3-3 non-rigid, flying in the first quarter of 2016.

In March, U.S. Reps. Tom Rooney (R-Florida) and Brad Sherman (D-California) announced formation of a bipartisan **Cargo Airship Congressional Caucus** to promote cargo airships for commercial and military use.