
PERSISTENT SURVEILLANCE SYSTEMS
ALWAYS THERE. ALWAYS ON.
LOCKHEED MARTIN
We never forget who we're working for®

THE FUTURE OF LIGHTER-THAN-AIR (LTA) SYSTEMS. A LEGACY OF MISSION PERFORMANCE.

LEGACY PERFORMANCE

Lockheed Martin delivered its first LTA systems to the U.S. Navy more that 75 years ago, and so launched an enduring legacy of LTA innovation, engineering and production. This legacy delivered more than 300 airships and thousands of aerostats with millions of hours of operational flights in support of military operations world-wide.

LEGACY COMMITMENT

A world-class team of Lockheed Martin engineers, technologists and operators has consistently over the last 75 years achieved and exceeded highly demanding customer programmatic, operational and support performance requirements.

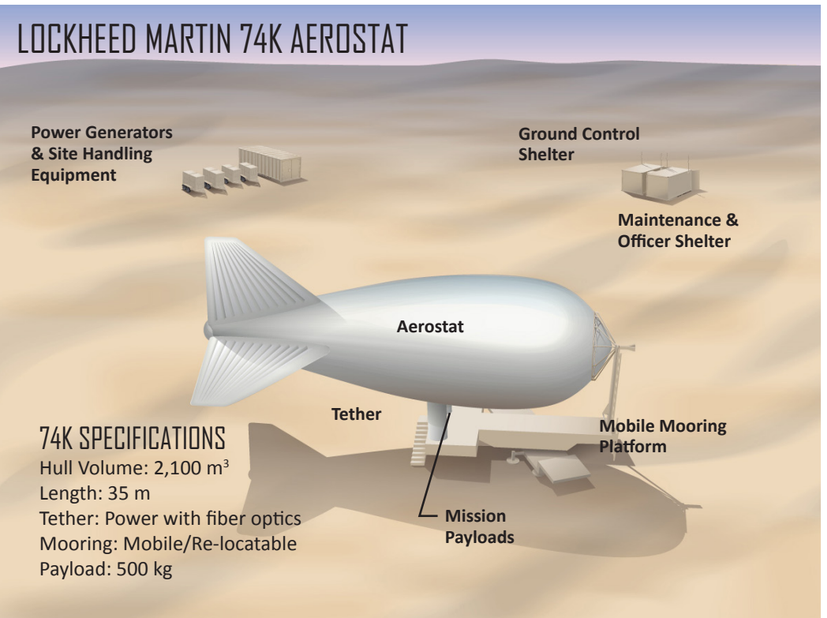
Lockheed Martin is fully equipped to address evolving LTA requirements and respond with systems and solutions to meet and surpass future requirements through:

- Dedicated design and calibrated analytic tools
- Comprehensive system and sub-system testing facilities
- Dedicated LTA System Integration Lab
- Expansive facilities for production, system assembly, payload integration, flight testing, and Airdock
- Direct access to the full breadth and depth of capabilities across Lockheed Martin Corporation

The result of the Legacy of Performance and Commitment has been the successful program execution exemplified by the Lockheed Martin 74K Aerostat System, the 420K Tethered Aerostat Radar System (TARS) and the High Altitude Airship (HAA®).

THE LOCKHEED MARTIN PERSISTENT SURVEILLANCE SYSTEMS LEVERAGE EXISTING C4 NETWORKS TO ENHANCE COMMUNICATIONS AND THREAT REPORTING ACROSS THE ENTIRE ARCHITECTURE.

LOCKHEED MARTIN 74K AEROSTAT



74K SPECIFICATIONS
Hull Volume: 2,100 m^3
Length: 35 m
Tether: Power with fiber optics
Mooring: Mobile/Re-locatable
Payload: 500 kg

PERSISTENT COMBAT SUPPORT 74K AEROSTAT SYSTEM

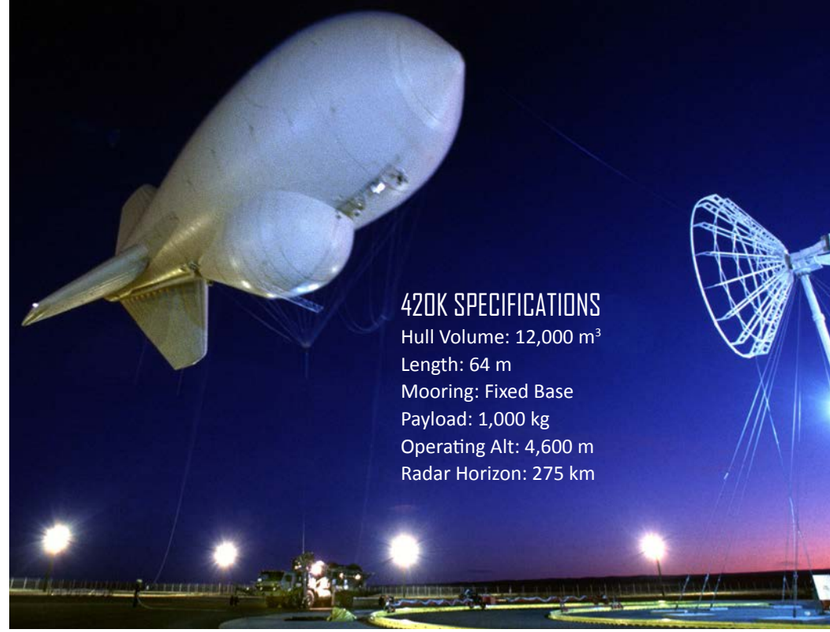
The Lockheed Martin 74K Aerostat System, with integrated multi-mission payloads and very high operational availability has supported the warfighter in many very challenging environments. With more than 1 million combat mission flight hours, the robust design of the 74K aerostat system supports the automated interoperability between tactical/theater surveillance assets and the dissemination of threat data to operational forces to aid interdiction of hostile fires and unconventional threats. The 74K aerostat system leverages a wide-area, secure communications backbone for the integration of threat reporting from multiple available sensor assets.

PERSISTENT BORDER SECURITY 420K AEROSTAT SYSTEM

The 420K Aerostat System is the standard configuration selected for the U.S. Southern Border Tethered Aerostat Radar System (TARS). All TARS are equipped and integrated with Lockheed Martin's L88 wide area surveillance radar.

The 420K is the only large aerostat system in daily operation in the United States. The TARS units provide low-level radar surveillance in several locations in support of the U.S. Department of Homeland Security border protection missions.

Each TARS is optimized to detect low, slow flying aircraft, and maritime and surface targets.



420K SPECIFICATIONS
Hull Volume: 12,000 m^3
Length: 64 m
Mooring: Fixed Base
Payload: 1,000 kg
Operating Alt: 4,600 m
Radar Horizon: 275 km

HIGH ALTITUDE AIRSHIP (HAA®)

The High Altitude Airship is an unmanned, untethered, lighter-than-air vehicle operating autonomously in the stratosphere for sustained, ultra long endurance missions as a stable, geostationary platform suitable for intelligence, surveillance, and reconnaissance (ISR) and communications.

The High Altitude Long Endurance Demonstrator (HALE-D) was developed as a proof of concept system to assess the feasibility of HAA technologies. Driven by two electric propulsion motors, the HALE-D validated several key technologies including a solar-based regenerative power system, advanced hull materials, and a unique trim system, all while demonstrating safe operations of an unmanned LTA system in national air space.

THE FUTURE OF LTA SYSTEMS

HAA KEY ATTRIBUTES:

- Persistent Global Operations (Months)
- Large Coverage Area (>800,000 km^2)
- Extremely Durable/Survivable
- Recoverable/Repairable/ Re-Taskable
- No In-theater Logistics
- Affordable Persistence

LOCKHEED MARTIN HALE-D

WE'RE ENGINEERING A BETTER TOMORROW

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