



An Ingersoll Rand Business

LIGHTER-THAN-AIR PLATFORMS



ILC Dover, an Ingersoll Rand Business, has a 75+ year legacy in aerospace and defense, pioneering softgoods technology solutions that protect human lives, safeguard high-value assets and sustain operations in extremely austere environments. Operating within our Aerospace & Defense Systems business unit, ILC Dover's lighter-than-air (LTA) platforms support a wide range of high-stakes defense and national security missions. As part of your team, we help customize mission-critical defense solutions that redefine safety, efficiency and adaptability.

Lighter Than Air Platforms

From tethered aerostats to high-altitude and hybrid airships, ILC Dover's LTA systems deliver unmatched endurance, altitude, and affordability—enabling persistent surveillance and sensing, secure data collection, and wide-area communications from elevated platforms.

ILC Dover has delivered more than 365 LTA platforms worldwide, offering both standard and customized solutions to support a range of mission types, including Intelligence, Surveillance and Reconnaissance (ISR), Border Security, Missile Defense, Force Protection, Communications, Environmental Monitoring, Cargo Transport and Disaster Relief.



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Your Strategic Asset in Defense Contracting

- Rich heritage and legacy in the defense industry dating back to WWII
- Strong repeat business from major partners, including Lockheed Martin and U.S. Department of Homeland Security due to our responsiveness, flexibility and technical performance
- Recognized as a critical enabler for integrated LTA platform success, supporting systems from radar payloads to communications arrays
- Lean operations and low overhead that translate into a lower price point
- Unparalleled track record in safety and reliability supporting 100% mission success
- Reputation for agility, niche expertise and keen ability to work with multiple integrators
- Fast-paced, nimble team with scalable production facilities and capabilities to deliver on-time, every time

Showcased Photo: Program with Lockheed Martin/U.S. Army to house high-altitude, long endurance (HALE) radar/surveillance platform. Designed to operate at 60,000 ft. for 15 days.

Tethered Aerostats



Our helium-filled, tethered aerostats are successfully deployed and trusted by the military for defense surveillance, border security, missile detection and persistent radar/sensor deployment. They can also support humanitarian aid and disaster response in remote areas.

- More than 280 aerostats delivered over the last few decades
- Supports payload altitudes up to 15,000 ft above ground level
- Helium volumes from 56,000-595,000 ft.³
- Fastened to the ground via a single tether during deployment
- Offer 75-90% lower carbon footprint than traditional aircraft or cargo ships
- Noted customers: Lockheed Martin, Qinetiq, Northrop Grumman, U.S. Department of Defense, U.S. Department of Homeland Security (Customs and Border Protection)

Showcased Photo: The 420,000 ft.³ Tethered Aerostat Radar System (TARS) supports DHS CBP. It measures 69.5 ft. in diameter, 208.5 ft in length and can accommodate a 2,200 lb. payload up to 15,000 ft. altitude.

Airships



These non-tethered, maneuverable vehicles support commercial industries, including passenger transport, cargo transport, advertising and tourism around the world. However, they can also support disaster recovery efforts, such as humanitarian aid disbursement, airborne command/control, continuous surveillance and search and rescue operations.

- More than 50 airships delivered since 1995
- Translucent multi-layer film laminate supports internally illuminated airships
- Tight tolerances compatible with rigid superstructures
- Known for ease of deployment, adaptability, resilience and portability
- Certified and operated on multiple continents
- Noted customers: U.S. Navy, Zeppelin, The Lightship Group, Goodyear

Showcased Photo: The LZN07, 220-ft-long airship envelope for Zeppelin is designed to interface with a semi-rigid passenger airship structure.

High-Altitude Airships (60,000+ Ft. Altitude)



ILC Dover has designed and developed high-altitude airships since the early 1980s in support of programs for MDA and DoD contractors.

The use of high altitude airships are increasingly being considered to provide economical coverage for long-distance hypersonic testing, missile warning, power transmission, resilient communications and wide-area persistent surveillance.

Showcased Photo: DARPA's Integrated Sensor Is Structure (ISIS) program, a Disruptive C2ISR providing an extremely large, dual-aperture radar capability integrated in a fully autonomous, stratospheric unmanned ship. Designed to operate at 65,000 ft. for several years.