



Lighter-than-Air Vehicles for Civilian and Military Applications

From the world leaders in the manufacture of aerostats, airships, air cell structures, gas balloons & tethered balloons



Aerostats
Parachute Training
Balloons
Airships





GA-22 Airship
Fully Autonomous



Nose Docking and Mooring Mast System

AEROSTATS

Aerostats are a cost effective and efficient way to raise a payload to a required altitude. Also known as a blimp or kite aerostat, aerostats have been in use since the early 19th century for a variety of observation purposes. The use of aerostats for signal intelligence gathering platforms has risen since 1954, when the Israelis pioneered the use of tethered aerostats as an electronic payload carrier by mounting a radar underneath an Airborne Industries aerostat. The latter half of the 20th century saw an expansion in the use of tethered aerostats as electronic platforms, and today it is common practice to have radar-equipped models in use.

Typical payloads include: day & night cameras; surveillance radars; VHF and UHF repeaters; and TV and radio transmitters.

Aerostats are designed to maximize operations in most weathers, and work equally well in both tropical and arctic conditions. They are helium filled and can be made in almost any size and to the client's specific requirements.

PARACHUTE TRAINING BALLOONS

The airborne Parachute Training Balloon system (PTB) is used to give preliminary training in static line parachute jumping. For this purpose, an Instructor and a number of trainees are carried to the operational height in a balloon car, the winch is stopped, and when certain conditions are satisfied, the trainees are dispatched and make their parachute descent from the balloon car.

AIRSHIPS

An airship or dirigible is a type of aerostat or "lighter-than-air aircraft" that can be steered and propelled through the air using rudders and propellers or other thrust mechanisms. Unlike aerodynamic aircraft such as fixed-wing aircraft and helicopters, which produce lift by moving a wing through the air, aerostatic aircraft, and unlike hot air balloons, stay aloft by filling a large cavity with a lifting gas.

The main types of airship are non rigid (blimps), semi-rigid and rigid. Non rigid airships use a pressure level in excess of the surrounding air pressure to retain their shape during flight. Unlike the rigid design, the non-rigid airship's gas envelope has no compartmentation. At sea level, the ballonets (internal flexible cells) are filled with air. As altitude is increased, the lifting gas expands and air from the ballonets is expelled through air valves to maintain the same hull shape. To return to sea level, the process is reversed. Air is forced back into the ballonets using auxiliary blowers.

Lindstrand Technologies Ltd produce non-rigid thermal, helium manned and helium unmanned airships. Airships are excellent surveillance vehicles and are very useful in scientific research and advertising. Airships are normally built to a specific end use and since the design and manufacture is conducted in-house, airships of almost any size can be built to the client's exact requirements. Airships can be flown either by remote control or via a pre-programmed flight path.

Day / Night Operations



TETHERED AEROSTAT SYSTEM INCLUDES:

AEROSTAT ENVELOPE

MOORING STATION & MAST

WINCH & TETHER CABLE

CONTROL SYSTEM & HEALTH MONITORING





Jungle Exploration Vehicle

COMPANY AWARDS

IFAI (*Industrial Fabrics Association International*)

AWARDS OF EXCELLENCE

2003 Alcan Loading Bay System, USA

2003 WDA 'Thought Bubbles', UK

OUTSTANDING ACHIEVEMENT AWARDS

2001 Magna Science Centre, UK

2006 Heathrow Bus Terminal Roof, UK

2007 AV Dome, Worldwide

2008 Inflatable Flood Barrier, USA

PERFORMANCE TEXTILES ASSOCIATION

2004 Winner of the Pertexa Industry Award and the Innovation Category

2005 Highly Commended - Innovation Category



T +44 (0) 1691 671 888

E sales@lindstrandtech.com

W www.lindstrandtech.com

Maesbury Road, Oswestry,
Shropshire SY10 8GA. UK



Lindstrand USA, Inc.

T 001 434 572 3445

E sales@lindstrandtech.com

W www.lindstrandusa.com

2202 Parker Avenue,
South Boston, VA 24592. USA