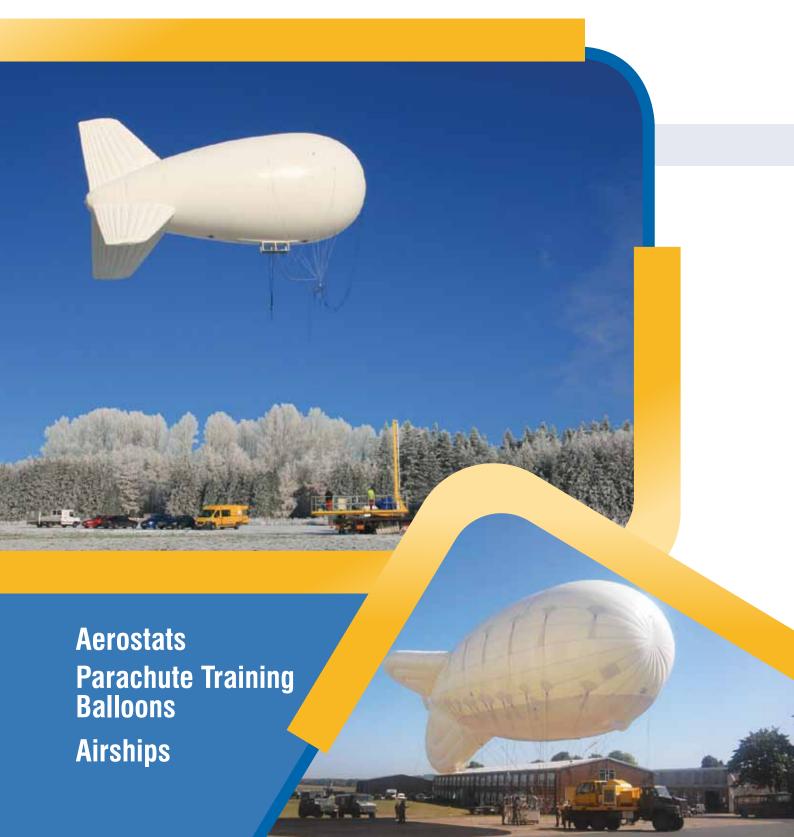


# **Lighter-than-Air Vehicles for Civilian and Military Applications**

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





#### PARACHUTE TRAINING BALLOONS

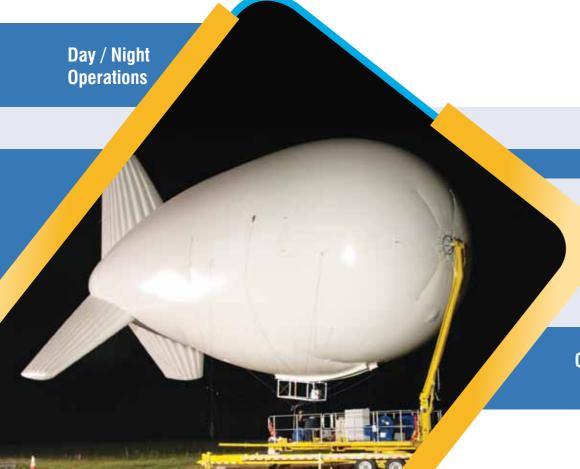
The airborne Parachute Training Balloon system (PTB) is used to give preliminary training in static line parachute jumping. For this purpose, an Instructor and a number of trainees are carried to the operational height in a balloon car, the winch is stopped, and when certain conditions are satisfied,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



They are helium filled and can be made in almost any size and to the client's specific requirements.

**TETHERED AEROSTAT SYSTEM INCLUDES:** 

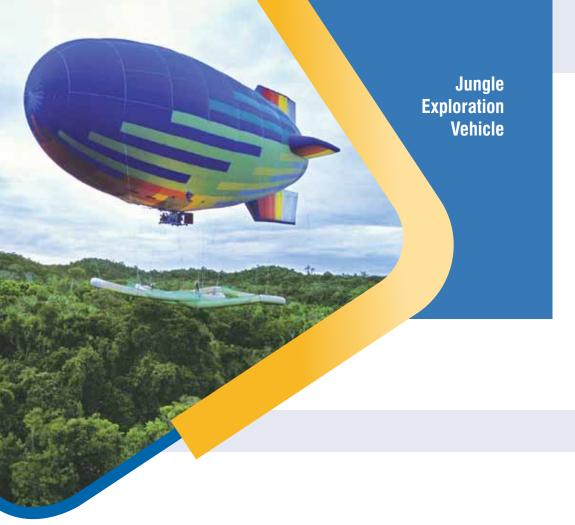
**AEROSTAT ENVELOPE** 

**MOORING STATION & MAST** 

WINCH & TETHER CABLE

**CONTROL SYSTEM & HEALTH MONITORING** 





#### **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



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