PARACHUTE TRAINING BALLOON SYSTEMS

GENERAL DESCRIPTION:
For decades, airborne Parachute Training Balloons (PTBs) have provided an inexpensive and efficient way for training in static line jumping. Some users have recorded more than a quarter of a million safe jumps without incident over the life of their systems. The PTB gives the essential independence required to plan and execute training programmes without the restriction of aircraft availability, something that has been proving increasingly problematic over recent years.

FEATURES:
- Aerodynamically optimised, fin stabilised aerostat
- Ability to weather vane, making the PTB system more stable and able to fly in higher winds. Most PTB jumping stops at 16 knots.
- Balloon car (gondola)
- Flying Cable
- Truck mounted winching system
- System can be moved in and out of a hangar for storage when not in use

PRINCIPLES OF OPERATION:
The PTB is inflated inside the storage hangar and secured to a truck mounted winch by a steel cable.

The gondola is attached to the balloon and the unit is driven to an adjacent dropping zone for jumping. Up to seven parachutists and a dispatcher enter the gondola and connect their static lines to the anchor point.

The flying cable is paid out and the balloon rises to a typical jump height of 250 to 300 meters (800 – 1000 ft). When certain conditions are satisfied, the trainees are dispatched and make their parachute descent from the gondola.

On completion of detail the balloon is winched down and the cycle is repeated. After completion of the training programme, the balloon system is secured inside a hangar until required for the next programme.
# PRINCIPLE CHARACTERISTICS OF LTL PTB:
- Inflated length of balloon = 30 meters
- Inflated diameter = 10.5 meters
- Float height of system = 500 meters
- Maximum helium gas capacity = 1,650 m$^3$
- Gas relief valve
- Emergency gas release system

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## SYSTEM BENEFITS:

- **Simple, reliable and cost effective system:**
  - Economical, inexpensive and proven system for static jump conditions.
  - Cost of procurement, operations and maintenance of the PTB is minimal compared to the cost of using transport aircraft.
  - Minimum cost for maintenance using small number of personnel.

- **Independence in planning and executing PTB programmes:**
  - Not dependent on aircraft availability
  - Execute jumps in wind conditions up to 16 knots
  - Continuous use
  - Operational within minutes, on reaching drop zone
  - Small drop zone area

- **Static line basic training and refresher courses:**
  - Better controlled parachuting environment
  - Better perspective for first time jumpers
  - Trainees can receive voice instruction
  - Very short cycle time

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## FOR FURTHER INFORMATION PLEASE CONTACT:

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