

AEROLIFT

Tethered Aeronautical Attraction

Thanks to AEROLIFT attraction thousands of people will be able to see the world from a bird's-eye view. Satisfying people's desire to fly, at the same time AEROLIFT stays a safe attraction with an affordable ticket price. Therefore it looks winning from an investor's point of view and has tremendous advertising potentiality.



AeroLift Attraction Technical Data

Envelope volume, cubic. m	3200
Ballonet volume, cubic m	450
Maximum diameter of envelope, m	18
Carrying capacity, kg	1400
Attitude of ascent using ground cable, m	90 to 150
Angle of declination of the cable, deg	30 max.
Maximum wind speed by	
the ground storm mooring system, m/sec	30
at a working altitude, m/sec	10
Speed of ascent, m/sec	up to 1
Speed of descent, m/sec	0.7
Time of cycle, min	6



RosAeroSystems

AEROLIFT

Tethered Aeronautical Attraction



The basket of AEROLIFT attraction spherical aerostat is capable of carrying up to 18 persons. Strong steel cable attached to the ground holds out the aerostat structure. Vertical displacement (i.e. up and down) is provided by veering and hauling the cable with an electric winch. The winch applied here provides smooth drum rotation speed variation to avoid dynamical overloads in the passenger basket. To make embarkation and disembarkation more comfortable for passengers, a special landing platform has been developed. Spherical envelope is filled in with a safe gas - helium - and has been made of high-strength gas-holding material by means of RF welding. That is why one envelope can be operated for 4-6 years without replacement. To compensate pressure drops, air-ballonet is provisioned inside the envelope. Moreover, AROLIFT aerostats are already staffed with stationary parking facilities used to save the envelope during the night time. This is a pneumatic anchor ring capable of holding on the aerostat under wind speed up to 30 km/h conditions. In case of the weaker wind (15 km/h) - 8 parking ropes and winches do the same job.

In order to guarantee safety for passengers, the attraction is supplied with pressurizing control signaling system inside envelope, mobile gas replenishment system, gas and air valves. Being a high-altitude object, the attraction is equipped with navigation lights, which turn on in the night time. Parking platform is supplied with automatic winch stop system. In case of premeditated cable damage, free flight is also permissible, as gas releasing system and emergency ballast are provisioned for AEROLIFT structure.

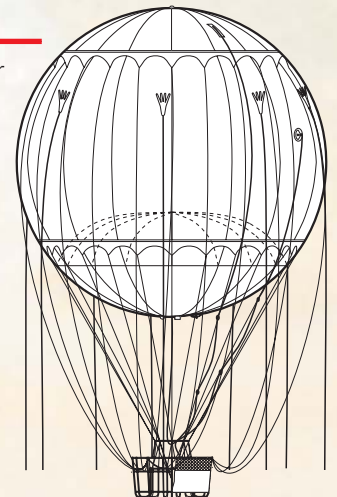
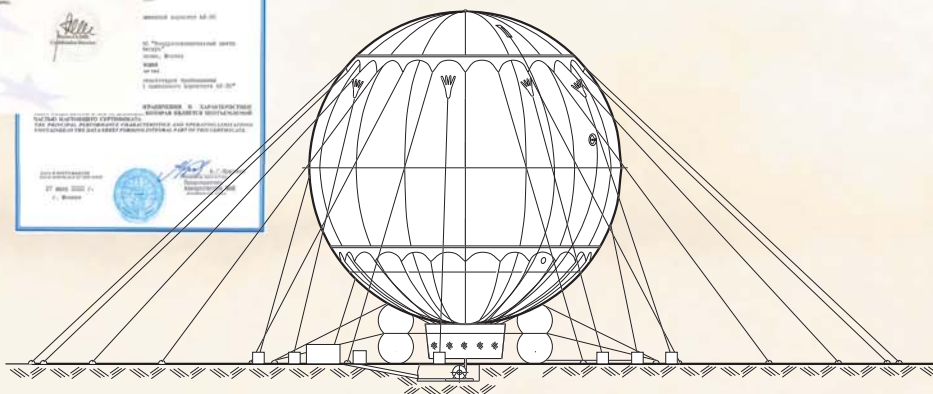
The similar attractions are being employed in England, France, the USA, Brazil, Sweden and other countries (see photo), being popular there. In the average for, one summer season each aeronautical attraction is attended by 30 to 40 thousands people. Tickets cost about \$10 to \$20. Usually one or two successful seasons pay back all the expenses connected with the attraction purchase and operation.

High product quality is proofed by Type Certificates of Interstate Aviation Committee of CIS and EASA (European Aviation Safety Agency).

AEROLIFT attraction was the first Russian aircraft to be certified by EASA - since its foundation in 2002 - and can be employed all over Europe.

AEROLIFT Type Certificate is enough to operate it abroad, as far as all the international requirements compliances were proved here.

AL-30 aerostat at the parking platform scheme



AL-30 aerostat scheme