

RUSSIAN FEDERATION



LAVOCHKIN ASSOCIATION

VENUS MISSIONS

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The 4th VEP SCIENCE TEAM MEETING

Oxford (United Kingdom)

January 24, 2007

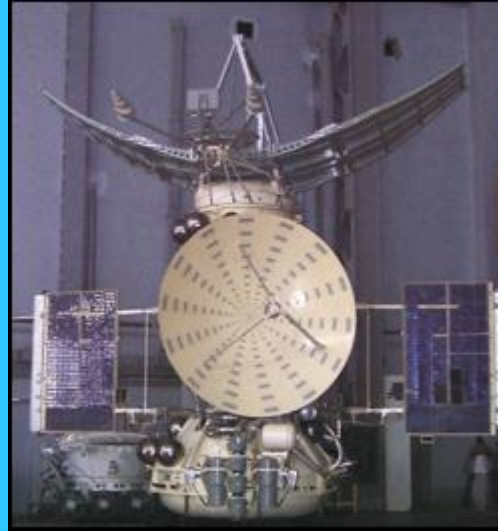


FORMER VENUS MISSIONS (1967-1984)

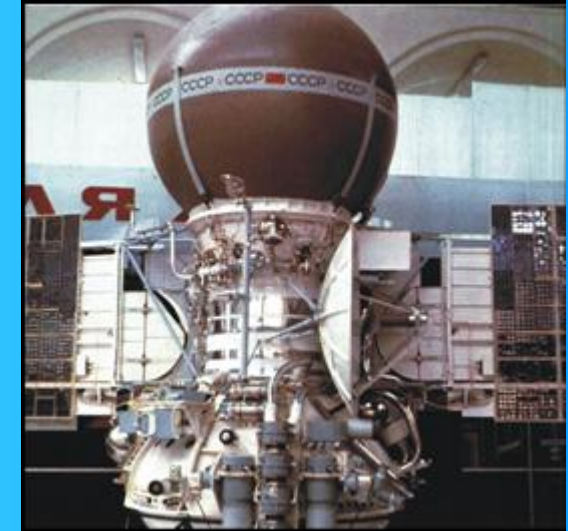


Landing vehicles

*("Venera"-4,-5,-6,-7,-8,-9,-10,-
11,-12,-13,-14);*



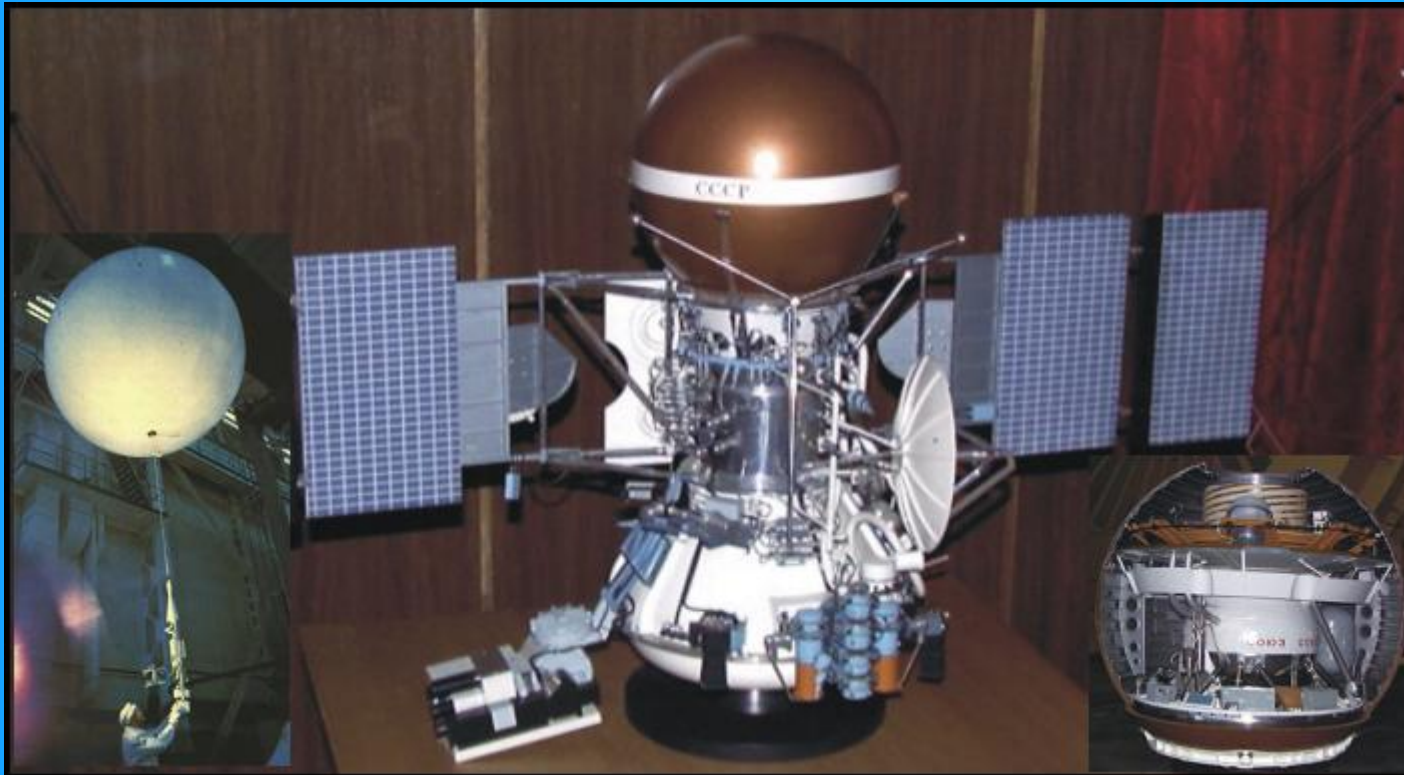
*Venus artificial satellites
("Venera"-9,-10,-15,-16);*



*Fly-by vehicles
("Venera"-11,-12,-13,-14)*



VEGA MISSION (1984-1986)



*Multipurpose interplanetary stations for studying Venus
(balloon probes and landing vehicles) and Halley's comet fly-by vehicles ("Vega"-1,-2)*



VENUSIAN BALLOONS OF VEGA PROJECT (1984-1986)

Balloon allowed to perform analysis of dynamics of cloud layer of the Venus atmosphere.

The envelope of venusian balloon was made from fluorolone composition varnished fabric.

Basic characteristics

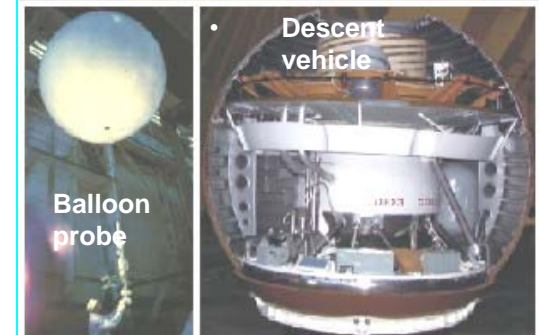
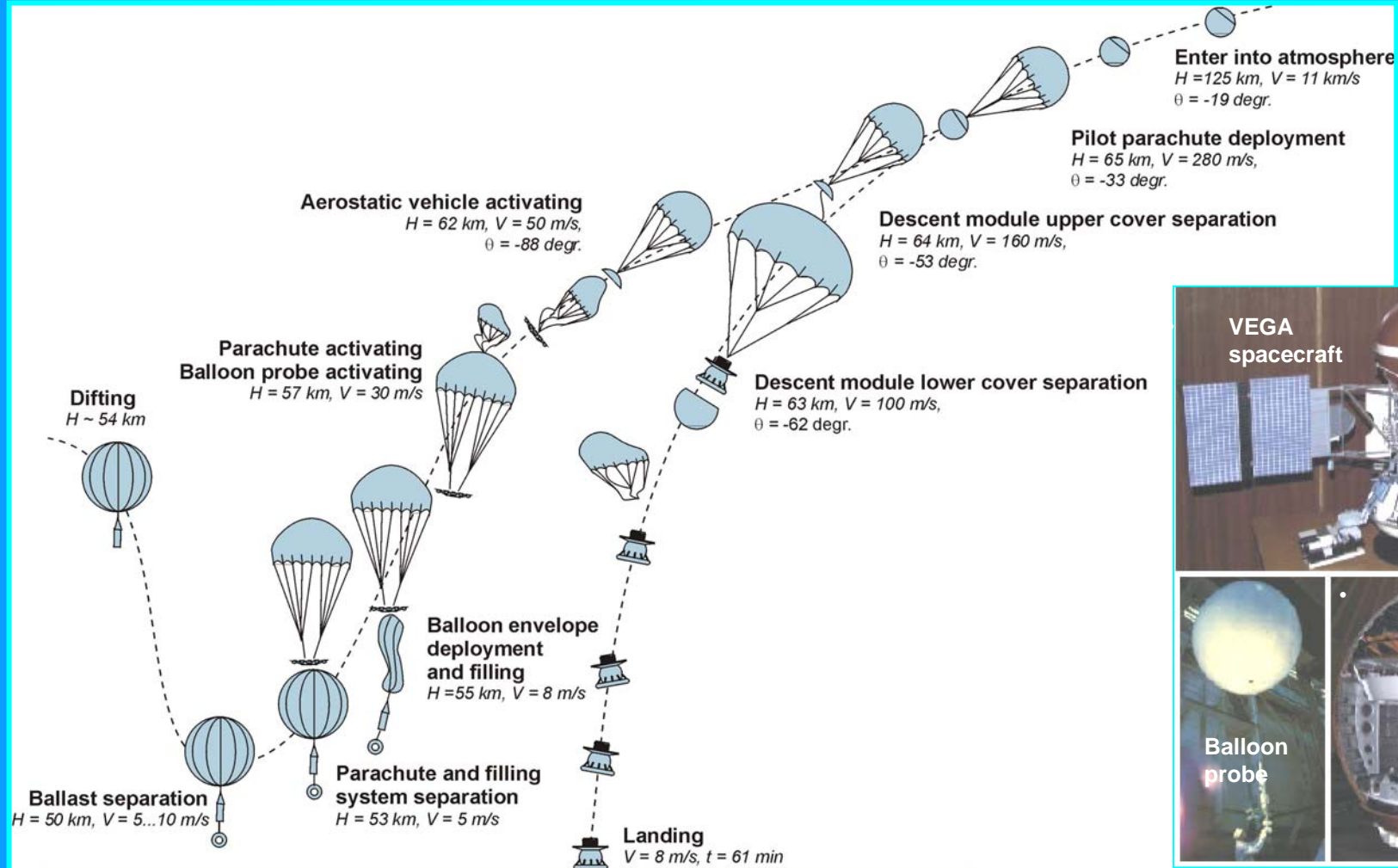
Diameter3,4 m
Operating pressure400 mm
H₂O
Working gashelium
Lift force20 kgf

Time of active operation – 8 days



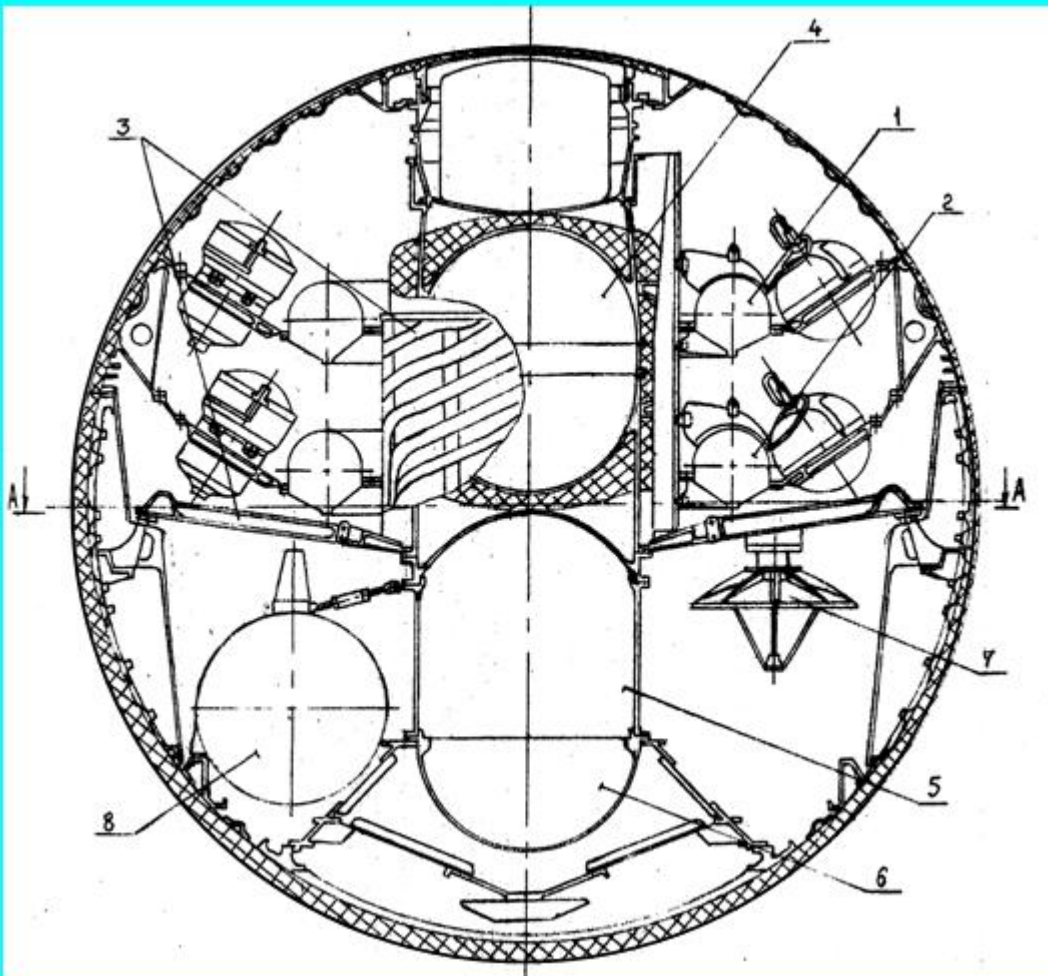


VEGA DESCENT PROFILE





DESCENT VEHICLE



1 – Balloon (B-1)

2 – Balloon (A3-2)

3 – Drifting probe

4 – Section of the drifting probe
housekeeping and scientific
equipment

5 – Container of the drifting probe

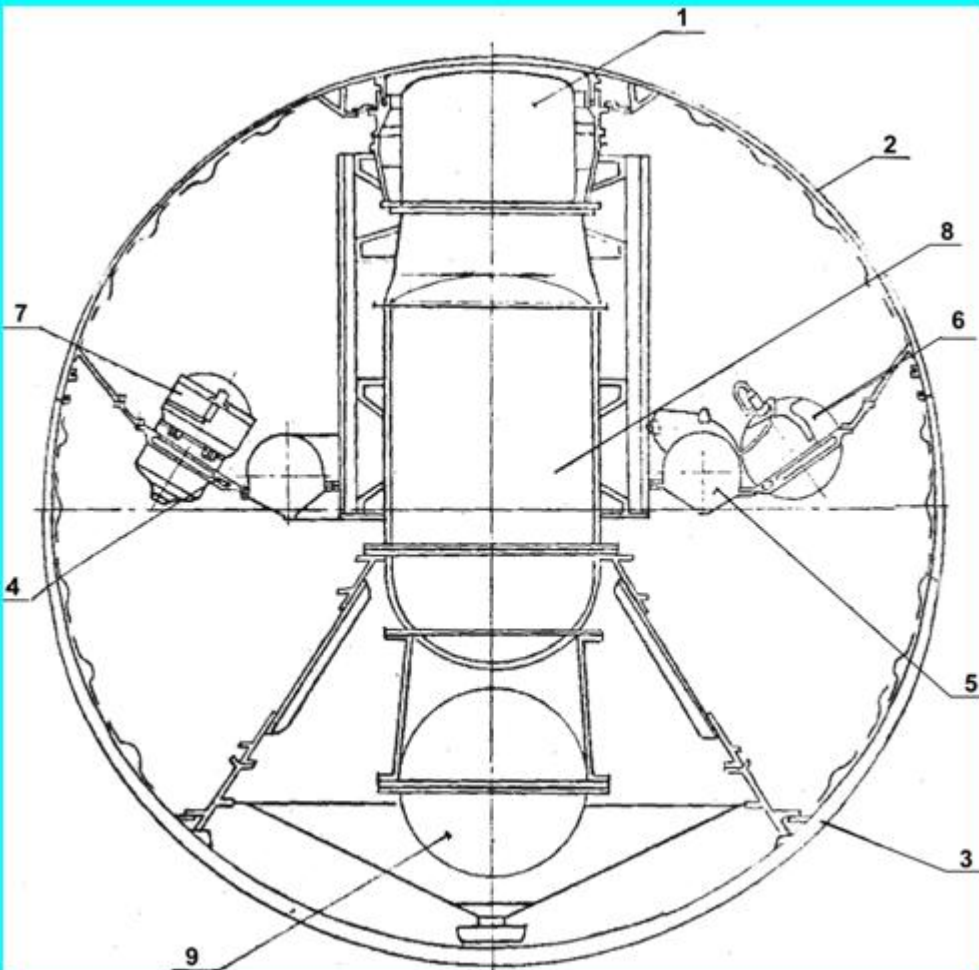
6 – Section of the drifting probe scientific
equipment

7 – Radar

8 – Landing probe



DESCENT VEHICLE



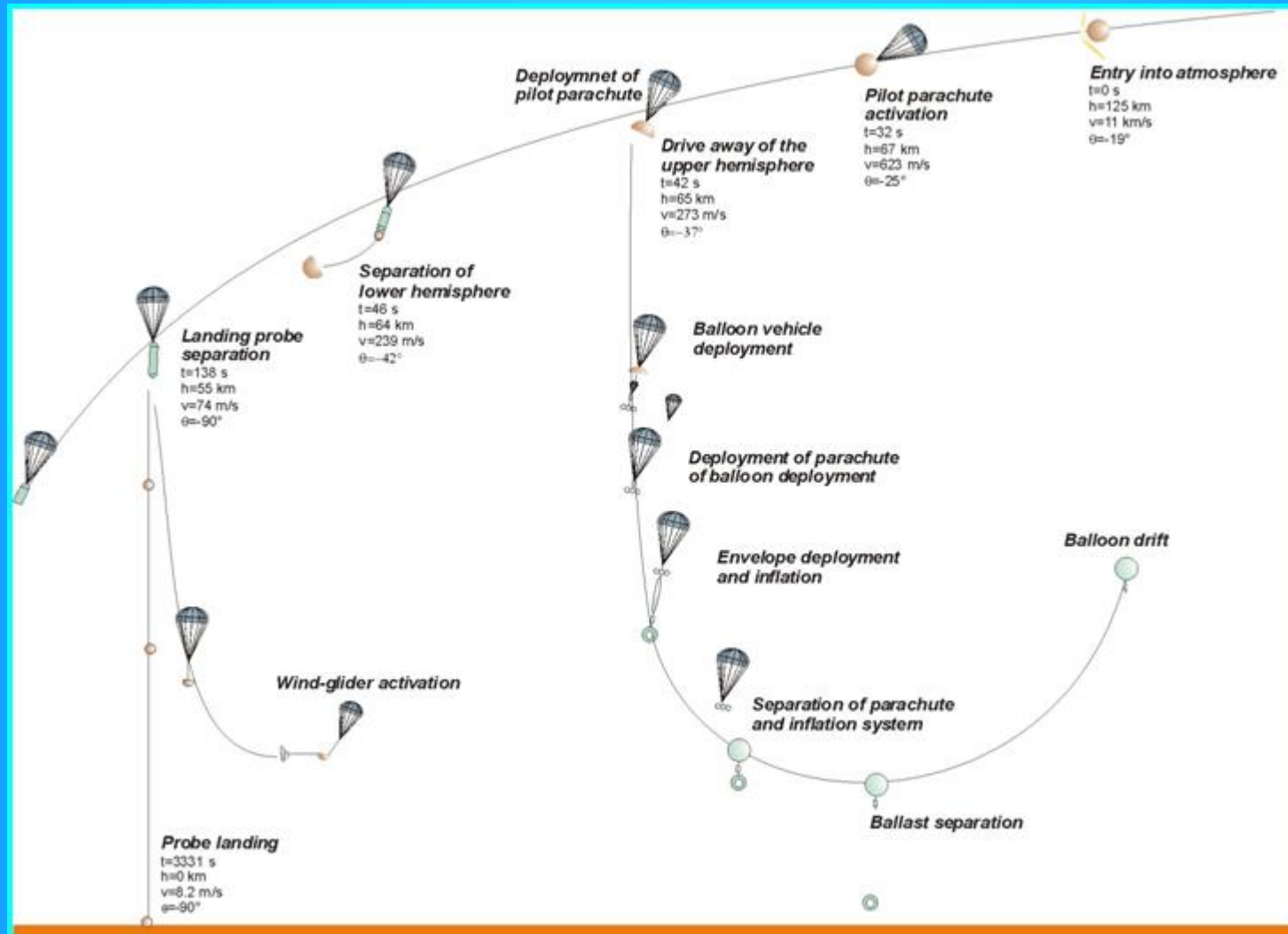
- 1 – Parachute Bay
- 2 – Upper Hemisphere
- 3 – Lower Hemisphere
- 4 – Load-carrying Cone
- 5 – Container with Balloon Envelope
- 6 – Gas Bottles
- 7 – Container of Balloon Parachute System
- 8 – Container with Drifting Probe
- 9 – Landing Probe

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DESCENT PROFILE FOR VENUS MISSION



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THANKS FOR YOUR KIND
ATTENTION!