

# Hypobaric chamber

## Introduction

The hypobaric or altitude chamber consists of two chambers. A small chamber is used for testing of equipment and training of pilots who will fly at extreme altitudes. A larger chamber is used for normal training of all personnel that plan to fly above 3,000 m (10,000 ft) cabin height. The chamber is also used for treatment of certain medical disorders.

## Hypoxia Training

The chamber can accommodate three participants plus instructor and can simulate cabin altitudes up to 20,000m. This can be used to recreate loss of cabin pressure or prolonged exposure to high altitudes and reduced oxygen. Observation windows, cameras and communication systems allow those outside to see and hear colleagues inside the chamber and thereby reinforce the training experience.

The chamber also has been upgraded for "normobaric" hypoxia training. In this scenario, the training is performed at ground level and hypoxia is simulated by supplying reduced oxygen breathing air.

## Technical Specifications

- Maximum altitude: 20 000 meters
- Maximum altitude change speed: 350 meters/second
- Capacity in small chamber: 1 person
- Capacity in the big chamber: 4 persons



**The Flight Physiological Centre**  
QinetiQ Sweden AB  
P.O Box 1541  
SE- 581 15, Linköping  
Sweden

info@QinetiQ.se  
[www.FPC.QinetiQ.se](http://www.FPC.QinetiQ.se)

© Copyright QinetiQ Ltd 2014  
QINETIQ/DS14/01321