

# Perlan II glider high-altitude record bid

The Airbus-sponsored Perlan II mission is in Argentina for a second year of flight operations in a bid to set a new glider altitude record by riding waves created by powerful gusts of wind over the Andes Mountains

**PERLAN II:** Engineless aircraft can ride air currents up to 27.5km (90,000ft)

**Pressurised cabin:** Eliminates need for bulky flight suits. Two pilots breathe pure oxygen using rebreather system

**Parachutes:** Help aircraft to descend safely in event of emergency

Airframe parachute

Drogue chute

**El Calafate, Argentina**  
Perlan II base

## Polar vortex

Cyclone of fast-moving air strongest during austral winter – feeds westerly winds moving over mountains

Antarctica

## “Mountain waves”

Winds deflected upwards by mountain ridges help glider soar into stratosphere

## Perlan II specifications



Length: 10.16m

Wingspan: 25.6m

**Flight speed:** 650km/h\*  
**Gross weight:** 816kg  
**Payload:** Instruments to gather data on high-altitude flight, greenhouse gases and ozone levels

20km

15

10

5

0

**STRATOSPHERE**

Target altitude  
**16.7km**

Wind

Current record  
**15.46km**

**TROPOSPHERE**