

El Calafate, Argentina, is scene for glider reaching new highs

August 7 2017, by Nancy Owano



Credit: Airbus

"Altitude record" marks the achievement of one project which is set to nab even new higher numbers, with an added special mission to collect valuable data.

The aviation goal, said *Carson Valley Times*, is to fly a glider without an engine to the edge of <u>space</u>.



First, the latest, and good, news. Airbus Perlan Mission II has reached a new high altitude. This sky glider earlier this month reached its own best altitude of 32,500 feet.

The four pilots were Jim Payne, Morgan Sandercock, Tim Gardner and Miguel Iturmendi. And, yes, *that* Airbus, which is in the business of aeronautics, space and related services; they are sponsoring the effort.

This Perlan Project is an all-volunteer exploration team of aviators and scientists. The project is supported by Airbus with other sponsors; the latter include Weather Extreme, United Technologies and BRS Aerospace. The project also carries a lengthy list of equipment, service and institutional donors: These include the University of Washington Applied Physics Laboratory and Intel.

Editor-Web Jim Moore AOPA (Aircraft Owners and Pilots Association), said while the glider reached 32,500 ft, "the plan is to ride a combination of mountain waves and polar vortex much <u>higher</u> than that."

Moore said this latest milestone, reported in an August 2 news release, raised the bar a bit from the 30,690 feet attained in April over Minden, Nevada.

The team now plans to soar past the existing sailplane record of 50,727 feet, set by Einar Enevoldson and Steve Fossett in Perlan I in 2006.

The target altitude will actually be 90,000 feet, said AVweb.

This is how the project team described their intention:

"The Perlan 2 will fly to 90,000 feet at the edge of space to explore the science of giant mountain waves that help create the ozone hole and



change global climate models. This will require the engineering of a spacecraft with glider wings that can fly in less than 3% of normal air density and at <u>temperatures</u> of minus 70 degrees C, conditions approximating the surface of Mars."

The August altitude was achieved in the second season of flight testing in El Calafate, Argentina. Why did they choose that site?

The Airbus news release said, "El Calafate, in the Patagonian region of Argentina, is in one of a few places on earth where a combination of mountain winds and the <u>polar vortex</u> create the world's highest "<u>stratospheric</u> mountain waves" – rising air currents that Perlan pilots believe can eventually carry their experimental aircraft to the edge of space."

Achieving higher numbers, meantime, is not the sole goal. They are after collecting significant data that can tell us more about (1) factors influencing climate change and (2) insights into high altitude turbulence and radiation effects on pilots and aircraft.

Perlan Project CEO Ed Warnock said, "Just last month the world witnessed another reminder of the importance of understanding climate change, with the fracture from the Antarctic ice shelf of an iceberg the size of the state of Delaware."

He said the Mission II will enable them to study a range of <u>atmospheric</u> phenomenon that ultimately will provide more accurate models of the upper atmosphere and the climatic changes.

Carson Valley Times noted one of Perlan 2 aircraft's unique attributes: "Unlike a weather balloon, it can be steered, can stay in one area, and can take off and land in the same location."



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