

Solar Impulse 2 over Sea of Japan, day after take-off

May 31 2015



Crew members pull Solar Impluse 2 as it readies to take off from Nanjing's Lukou International Airport early on May 31, 2015

The Solar Impulse 2 aircraft flew over the Sea of Japan Monday, almost 24 hours after it set off on the most ambitious leg of its quest to circumnavigate the globe powered only by the sun.

Pilot Andre Borschberg, 62, was flying between North Korea and Japan at about 1600 GMT, according to a tweet posted by his team, marking

nearly the first full day on a six-day, six-night flight that will take him over the Pacific Ocean.

Borschberg's compatriot and fellow Solar Impulse 2 pilot Bertrand Piccard noted on Twitter that the overnight flight would be the first time the aircraft would have to fly "through the night", during which time it will rely on battery power.

Overall, the 8,500-kilometre (5,270-mile) flight to Hawaii could set a record for duration by a single pilot, organisers said.

It is the seventh and longest section of the maiden solar-powered global circumnavigation, an attempt to promote green energy.

The journey began in Abu Dhabi in March and is scheduled for 12 legs, with a total flight time of around 25 days.

Each day on the Pacific voyage, Borschberg will experience altitudes of 28,000 feet (8,530 metres), akin to the world's highest peak, and massive temperature changes in the unpressurised, unheated Solar Impulse 2 cockpit.

At the same time he will only be able to catch the shortest of naps—his seat doubles as a bed—given the need to check the autopilot.



Swiss pilot Andre Borschberg talks to the press before Solar Impluse 2 takes off from Nanjing's Lukou International Airport, early on May 31, 2015

But failure could mean a parachute descent into the ocean, hundreds of kilometres (miles) from rescue.

No ship will trail the plane as it travels far too fast for a maritime vessel to keep up with, even though its maximum speed of 140 kilometres an hour is much slower than conventional jet aircraft.

Solar Impulse 2 is powered by more than 17,000 solar cells built into wings that, at 72 metres, are longer than those of a Boeing 747 and approaching those of an Airbus A380 superjumbo.



This handout photo taken on May 31, 2015 by the Solar Impulse project shows the Swiss-made solar-powered plane Solar Impluse 2 taking off from Nanjing's Lukou International Airport

In advance of the Pacific flight, the crew stripped off two side wheels and internal brakes from the propellers to make the fragile-looking craft—already just 2.3 tonnes, the weight of a large SUV—as light as possible.

The plane is the successor of Solar Impulse, which notched up a 26-hour [flight](#) in 2010, proving its ability to store enough power in lithium batteries during the day to keep flying at night.

Ridiculed by the aviation industry when it was first unveiled, the venture has since been hailed around the world, including by UN chief Ban Ki-moon.

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