

# Solar Impulse plane leaves Oklahoma for Dayton

May 21 2016

---



The Solar Impulse 2 has wings wider than those of a Boeing 747 and contains 17,000 solar cells that power its propellers

An experimental, solar-powered aircraft took off from Tulsa in the midwestern US state of Oklahoma early Saturday, kicking off the latest phase of its record-breaking quest to circle the globe without consuming a drop of fuel.

Swiss businessman Andre Borschberg, who has teamed up with adventurer Bertrand Piccard for the Solar Impulse 2 project, piloted the flight expected to last about 18 hours.

The plane, which aims to promote clean energy technologies, departed at 4:22 am (0922 GMT) from Tulsa International Airport and was due to land at Dayton International Airport, Ohio, hours later, at 11:00 pm (0300 GMT Sunday), project organizers said.

"The flight is part of the attempt to achieve the first ever Round-The-World Solar Flight, the goal of which is to demonstrate how modern clean technologies can achieve the impossible," they said in a statement.

"Watching Si2 silently lift off is beautiful. Science fiction in reality!" a logbook comment said on the project's website.

The journey kicked off in Abu Dhabi on March 9, 2015.

Thanks to an inflatable mobile hangar, which can be packed up quickly and transported, Solar Impulse 2 can be sheltered at a variety of locations.

The aircraft was grounded in July when its batteries were damaged halfway through its 21,700-mile (35,000-kilometer) circumnavigation of the globe.



Swiss pilots Bertrand Piccard (R) and André Borschberg (L) hope to complete the first ever round-the-world solar flight

The crew took several months to repair the damage caused by high tropical temperatures during a 4,000-mile flight between Nagoya, Japan and Hawaii.

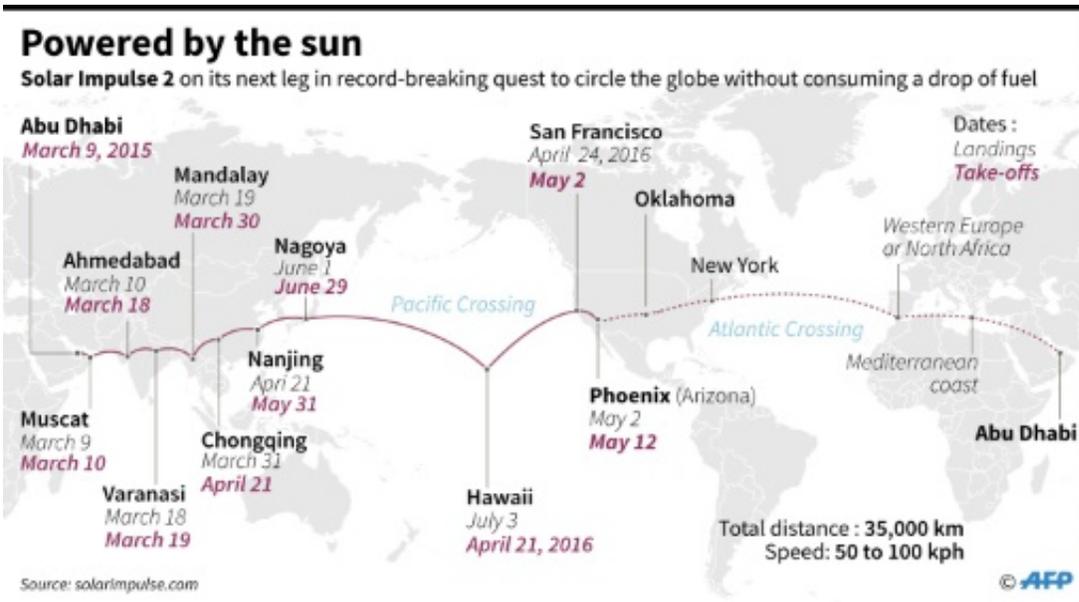
The plane was flown on that stage by Borschberg, whose 118-hour journey smashed the previous record of 76 hours and 45 minutes set by US adventurer Steve Fossett in 2006.

He took catnaps of just 20 minutes at a time to maintain control of the pioneering plane during the flight from Japan, in what his team described as "difficult" conditions.

## How it works

The Solar Impulse 2, which weighs roughly the same as a family car but has wings wider than those of a Boeing 747, contains 17,000 solar cells that power the aircraft's propellers and charge batteries.

At night, the plane runs on stored energy.



## Solar Impulse 2

The typical flight speed is around 30 miles an hour, which can increase to double that when exposed to full sunlight.

After crossing the United States, the pilots are set to make a transatlantic flight to Europe, from where they plan to make their way back to their point of departure in Abu Dhabi.

Piccard, a doctor by training, completed the first non-stop round-the-world balloon flight in 1999.

His teammate Borschberg is no stranger to adventure—15 years ago he narrowly escaped an avalanche, and in 2013 he survived a helicopter crash with just minor injuries.

© 2016 AFP

Citation: Solar Impulse plane leaves Oklahoma for Dayton (2016, May 21) retrieved 19 September 2024 from

<https://phys.org/news/2016-05-solar-powered-plane-latest-leg-oklahoma.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.