# Solar plane takes off on last flight of US journey

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The Solar Impulse solar electric airplane takes off at Moffett Field on May 3, 2013 in Mountain View, California. Early Saturday, the aircraft departed Washington en route to New York on the final leg of its US tour aimed at showcasing the promise of clean energy, organisers said.

The experimental Solar Impulse aircraft was bound Saturday for New York, where it was to fly over the Statue of Liberty on the final leg of a US tour aimed at showcasing the promise of clean energy.

The plane, which runs on four electric propellers powered by an array of solar cells mounted on the plane's 63 meter (206 foot) wingspan, lifted off just before dawn from Washington Dulles International Airport at 4:46 local time (0846 GMT).

It is scheduled to land at New York's John F Kennedy airport around 2 am local time (0600 GMT).

"It's our shortest leg, but it's also the one that will last the longest," pilot Andre Borschberg said shortly after dawn, as he sat at the controls 8,000 feet (2,400 meters) above the ground, eating his breakfast.

"We took off very early and we can't land at Kennedy before two in the morning, because of traffic constraints and because the operations to land this plane are more complex than for a normal plane," Borschberg explained.

The Swiss pilot has taken turns with compatriot Bertrand Piccard on different legs of the flight across the United States.

He said, however, he would not be bored during the 21 hour-plus flight: "I've been thinking of this last leg since we started our project: how to integrate our plane into the area with the densest air traffic in the world?

"We also hope to fly over the Statue of Liberty this evening, which should happen between 10 pm and midnight (between 0200 GMT and 0400 GMT). So I'm very excited by what I'm doing and I won't feel the time dragging today!"

Pilot Bertrand Piccard gives a thumbs up before taking off in the Solar Impulse solar electric airplane at Moffett Field on May 3, 2013 in Mountain View, California. 'When you are in the most revolutionary airplane, and you know that so many people are following your flight, so many people support your message about clean energy, it is just awesome to be in that plane,' said Piccard.

The coast-to-coast US journey began on May 3, near San Francisco, California. The plane then landed in Phoenix (Arizona), Dallas/Fort Worth (Texas), St. Louis (Missouri), Cincinnati (Ohio) and the capital, Washington.

Before the final leg, the two pilots spoke of the most memorable moments from the cross-country flight.

For Piccard, a Swiss adventurer who founded Solar Impulse over a decade ago, one of those moments was flying past the Golden Gate

Bridge at the very start of the journey.

Borschberg recalled one of the most dangerous moments of the trip, when the wind threatened to unbalance the aircraft.

The crossing has been "more difficult than expected because of the weather: There were a lot of tornadoes, storms, causing several of our flights to be delayed or slowed down," Piccard noted.

"But despite it all, the trip was a big success."

Piccard said he hoped they could get permission to fly over New York while there is still light, and let residents of Manhattan and New Jersey get the "spectacular" view of the giant plane.

The aircraft is powered by 12,000 solar cells and flies through the dark by reaching high altitudes during the day and gliding downward over long distances by night. It uses no fossil fuels.

Drawbacks include the tiny cockpit, vulnerability to turbulence and the lack of a toilet, so the pilots must relieve themselves by using an empty plastic water bottle on solo flights that routinely last 20-24 hours.

"I never find it too long," Piccard earlier told AFP. "When you are in the most revolutionary airplane, and you know that so many people are following your flight, so many people support your message about clean energy, it is just awesome to be in that plane."

The current model, the HB-SIA, is soon to be phased out as the Swiss team prepares to make test flights of the second-generation aircraft, the HB-SIB next year.

Piccard said the next plane will be 10 percent bigger, with more power,

reliability, an auto-pilot function and a toilet so that pilots can make the four to six day long trips that will be part of its journey across the world in 2015.

The plane's American trip is just the latest in a series of groundbreaking flights across different parts of the world, including Europe and Africa.