

Solar-powered plane to make first cross-US flight (Update)

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The Solar Impulse plane is seen at a press conference at the NASA Ames Research Center in Mountain View, California on March 28, 2013. The innovative solar-powered aircraft is set to launch from California Friday on a flight across the United States, aiming to showcase what is possible without fossil fuels.

An innovative solar-powered aircraft is set to launch Friday from California on a flight across the United States, the first of its kind aiming to showcase what is possible without fossil fuels.

The experimental Solar Impulse plane—with the wingspan of a Boeing 747 but the weight of a small car—bears 12,000 solar cells.

By day, the cells power the plane's electric motors while also charging batteries, so the plane, unlike other solar aircraft, can keep flying all night.

The project was launched more than a decade ago, after inveterate adventurer Bertrand Piccard, 54, nearly ran out of fuel on his historic non-stop round-the-world balloon flight.

The Swiss psychiatrist decided to re-attempt the journey—Solar Impulse aims to launch its flight in 2015—without using any fossil fuel.

But the goal isn't to revolutionize air travel, the group said. Instead, it aims to fuel more innovation for using renewable resources more widely.

"Before, when you were talking about exploration, it was more about conquering the world, conquering territories," spokeswoman Alenka Zibetto told AFP.

"Now the real adventure is to make the world more sustainable, and to try to find solutions with the currently available technologies—to use what we currently have and adapt it.

"If we can do this in the air, we can also do this on the ground, in our everyday life," Zibetto said, suggesting the plane's solar panels could be adapted to power houses as well as solar-charged batteries in cars.

The Solar Impulse plane has already made several trips, including a 26-hour flight in 2010, but this will mark its first trip across a continent.



The Solar Impulse solar plane is seen at a press conference at the NASA Ames Research Center in Mountain View, California, on March 28, 2013.

The plane could make the flight nonstop—it would take approximately three days, traveling at the aircraft's cruising speed of around 43 miles (70 kilometers) per hour, its creators said.

But with space for only one pilot and the intensive task of navigating the ultra-light but ultra-long plane through turbulence, Solar Impulse decided, for safety reasons, to break the flight up into multiple stages.

That will allow two pilots—Piccard and his co-founder, Swiss engineer and ex-fighter pilot Andre Borschberg—to share duties and rest between legs.

"We have limited ourselves to fly a duration maximum of 24 hours," Borschberg, 60, said at a press conference in March.

The plane is scheduled to stay over in Phoenix, Dallas and the US capital

Washington, before arriving in New York in early July.

It will spend up to 10 days at each stop on its journey in order to showcase its technology to the public, schoolchildren and students who will also have a chance to talk with the pilots.

"The people will be able to follow the mission, to speak to the pilot, to ask questions," Piccard said.

"We would like to inspire students, schoolchildren, inspire as many people as possible to try to have the spirit to dare, to innovate, to invent."

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