

Solar plane flies toward Midwest after storms

June 3 2013

A solar-powered aircraft piloted by a Swiss adventurer left Texas Monday for Missouri where it will use a "revolutionary" inflatable hangar to replace one damaged in last week's Midwest tornadoes.

The flight of [Solar Impulse](#), with Bertrand Piccard at the controls, left at 0406 Central Time (0906 GMT) from Dallas-Fort Worth and was to land in St. Louis early Tuesday under cover of darkness.

The third leg of the journey is part of a five-stop across country US trip that began last month in California and aims to showcase the potential of [renewable energy technologies](#).

"The stopover in St. Louis during the crossing of the United States is very important and symbolic for Solar Impulse," the organizers said.

St. Louis was chosen as the Midwest stopover to pay homage to aviation pioneer Charles Lindbergh and his "Spirit of St. Louis," the first plane to fly from New York to Paris non-stop.

The Texas-Missouri leg is expected to be Piccard's longest flight in the single-seat cockpit to date.

Powerful storms that hit the St. Louis, Missouri area late Friday rendered Solar Impulse's hangar at Lambert-St. Louis International Airport unusable, organizers said.

"To protect the aircraft upon landing... Solar Impulse will deploy a revolutionary inflatable structure for the first time" when it arrives in Missouri, a statement said.

The Solar Impulse project, founded and led by two Swiss pilots, aims to showcase what can be accomplished without fossil fuels, and has set as its "ultimate goal" an around-the-world flight in 2015.

The first leg of Solar Impulse's US tour took place on May 3, when Piccard flew the aircraft from the San Francisco, California area to Phoenix.

On that initial leg, the plane—which has a slim body and four electric engines attached to enormous wings—flew at an average speed of about 30 miles (49 kilometers) per hour.

The aircraft set a new distance record on May 23 when it landed after the second leg of a cross-country US tour.

The previous distance record was attained by Solar Impulse one year ago on a 1,116 kilometer (693 mile) flight from Switzerland to Spain.

The US itinerary allows for up to 10 days at each stop in order to showcase the plane's technology to the public. Another stop is planned in the US capital Washington before the trip concludes in New York in early July.

Energy is provided by 12,000 solar cells that power the plane's propellers.

The plane can fly at night by reaching a high elevation of 27,000 feet (8,230 meters) and then gently gliding downward, using almost no power until the sun comes up to begin recharging the solar cells.

A dashboard showing the live speed, direction, battery status, solar generator and engine power are online at live.solarimpulse.com.

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Citation: Solar plane flies toward Midwest after storms (2013, June 3) retrieved 20 June 2024 from <https://phys.org/news/2013-06-solar-plane-flies-midwest-storms.html>

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