Solar Plane Takes First 24-Hour Flight

Frank Jordans, Associated Press Writer

GENEVA (AP) — An experimental solar-powered plane whose makers hope to one day circle the globe using only energy collected from the sun took off for its first 24-hour test flight Wednesday.

The plane with its 262.5-foot (80-meter) wingspan left Payerne airfield in Switzerland shortly before 7 a.m. (0500 GMT; 1 a.m. EDT) after overcoming an equipment problem that delayed a previous attempt, the Solar Impulse team said.

Clear blue skies mean the prototype aircraft will be able to soak up plenty of solar energy as it flies over the Jura mountains to the west of the Swiss Alps.

By midmorning pilot Andre Borschberg was cruising at 9,850 feet (3,000 meters), trying to avoid low-level turbulence and thermal winds that are frequent in the mountains.

He will take the plane to an altitude of 27,900 feet (8,500 meters) by Wednesday evening, when a decision will be made whether to continue through the night using solar power stored in its batteries.

"The goal of the project is to have a solar-powered plane flying day and night without fuel," said team co-founder Bertrand Piccard, adding that this test flight — the third major step after its first 'flea hop' and an extended flight earlier this year — will demonstrate whether the ultimate plan is feasible: to fly the plane around the world.

"This flight is crucial for the credibility of the project," said Piccard, a record-breaking balloonist whose father and grandfather also accomplished pioneering airborne and submarine feats.

The team had hoped to make their 24-hour test flight last week when days in the northern hemisphere were even longer, allowing the plane's 12,000 solar cells to collect even more energy before attempting to coast through the night.

But there was a problem with a key piece of communications equipment, forcing the team to keep the plane on the ground while modifications were made. Every aspect of the aircraft is monitored by engineers on the ground, with much of it fed onto the team's website and Twitter page.

Borscherg, the plane's sole pilot, will decide by 8 p.m. (1800 GMT; 2 p.m. EDT) whether to continue through the night. If he goes ahead, the plane will slowly descend to 4,920 feet (1,500 meters) before midnight, where Borschberg will stay until attempting a dawn landing.

Piccard, who achieved the first nonstop circumnavigation of the globe in a balloon, the Breitling Orbiter III, in 1999, said that, if successful, the next step will be an Atlantic crossing. That will be done in a second, lighter prototype, involving new challenges and dangers, he said.

Although the goal is to show that emissions-free air travel is possible, the team has said it doesn't see solar technology replacing conventional jet propulsion any time soon. Instead, the project is designed to test and promote new energy-efficient technologies.

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