Solar-powered plane to fly to Moroccan desert

June 12 2012

The Solar Impulse solar plane lands late on June 5 at Rabat Sale airport. The Swiss sun-powered plane is preparing to take off from Rabat to southern Morocco's desert region in its first, and potentially dangerous, flight in a hot and arid climate.

The Swiss sun-powered plane Solar Impulse is preparing to take off Wednesday from Rabat to southern Morocco's desert region in its first, and potentially dangerous, flight in a hot and arid climate.

The prototype piloted by Swiss Andre Borschberg plans to take off from Rabat's Sale airport at 0700 GMT and fly south to the city of Ouarzazate where it is expected to land sometime after 2300 GMT Wednesday, or past midnight local time, a statement said Tuesday.

The high-tech aircraft, which has the wingspan of a large airliner but weighs no more than a saloon car, is fitted with 12,000 solar cells feeding four electric engines and flies without using a drop of fuel.

Flying to the Moroccan sand dunes -- the backdrop to the 1962 British cinema epic "Lawrence of Arabia" -- poses particular challenges such as thermal currents, strong winds and thunderstorms.

In fact, weather conditions could prompt the flight director to delay the flight or alter the route.

"This flight will certainly be the most difficult the plane has ever undertaken due to the hot and dry nature of the climate as well as the proximity of the massive Atlas mountains," towering up to more than 3,000 metres, the statement said.

"It is potentially extremely dangerous," said pilot Borschberg. "I know it is not going to be easy but I have the deep feeling that we know enough" to make a successful landing in the desert.

Two itineraries are under consideration: one would follow Morocco's Altantic coastline to Agadir at an altitude of 8,600 metres (28,000 feet) and bypass the Atlas mountains, while an inland option would take the aircraft towards Marrakesh at the foot of Atlas range.

The flight will be live-streamed on the project's website www.solarimpulse.com.

Last month, the solar-powered aircraft made the 2,500-kilometre (1,550-mile) journey from Madrid to Rabat, its longest to date, after an inaugural flight to Paris and Brussels last year.

The flights are intended as a rehearsal for the goal of a round-the-world trip in 2014.

The southern Moroccan destination of Quarzazate is also the future site of Morocco's first solar energy complex, the solar energy agency Masen said in a joint statement with Solar Impulse.

Masen is charge of building the 160 megawatt solar energy plant with plans to reach a capacity of 500 MW by 2015.

Solar Impulse made history in July 2010 as the first manned plane to fly around the clock on the sun's energy.

It holds the record for the longest flight by a manned solar-powered plane after staying aloft for 26 hours, 10 minutes and 19 seconds above Switzerland, also setting a record for altitude by flying at 9,235 metres (30,298 feet).