



An idea born in Switzerland

**CONTENT NOT FOR DISTRIBUTION BEFORE 11:00 GMT, WEDNESDAY, JULY 15, 2015**

PRESS RELEASE

## **IRREVERSIBLE DAMAGE TO OVERHEATED BATTERIES IN THE SOLAR IMPULSE AIRPLANE PUSHES THE SECOND HALF OF ROUND-THE-WORLD SOLAR FLIGHT TO APRIL 2016**

HAWAII, July 15th, 2015 - **Despite the hard work of the Solar Impulse team to repair the batteries which overheated in the record breaking oceanic flight from Nagoya to Hawaii, the solar powered airplane of Bertrand Piccard and André Borschberg will stay in Hawaii until early spring 2016.**

Following the longest and most difficult leg of the round-the-world journey which lasted 5 days and 5 nights (117 hours and 52 minutes), Solar Impulse will undergo maintenance repairs on the batteries due to damages brought about by overheating.

During the first ascend on day one of the flight from Nagoya to Hawaii, the battery temperature increased due to a high climb rate and an over insulation of the gondolas. And while the Mission Team was monitoring this very closely during the flight, there was no way to decrease the temperature for the remaining duration as each daily cycle requires an ascend to 28'000 feet and descend for optimal energy management.

Overall the airplane performed very well during the flight. The damage to the batteries is not a technical failure or a weakness in the technology but rather an evaluation error in terms of the profile of the mission and the cooling design specifications of the batteries. The temperature of the batteries in a quick ascend / descend in tropical climates was not properly anticipated.

Irreversible damage to certain parts of the batteries will require repairs which will take several months. In parallel, the Solar Impulse engineering team will be studying various options for better cooling and heating processes for very long flights.

The University of Hawaii with the support of the Department of Transportation will host the airplane in its hangar at Kalaheo airport. Post maintenance check flights will start in 2016 to test the new battery heating and cooling systems. The round-the-world mission will resume early April from Hawaii to the USA West Coast. From there Solar Impulse will cross the USA to JFK in New York before making the Atlantic crossing to Europe and then returning the point of departure in Abu Dhabi.

Solar Impulse is attempting a historic first of flying around the world only on solar energy. And while Solar Impulse has completed 8 legs, covering nearly half of the journey, setbacks are part of the challenges of a project which is pushing technological boundaries to the limits. Solar Impulse will try to complete the first ever round-the-world solar flight in 2016 and this delay will in no way influence the overall objectives of this pioneering endeavour.

OFFICIAL PARTNERS



HOST PARTNERS



# SOLARIMPULSE AROUND THE WORLD



An idea born in Switzerland

## Media contacts:

Solar Impulse  
Media Relations Department  
T. +41 58 219 24 60  
E. [press@solarimpulse.com](mailto:press@solarimpulse.com)

## About Solar Impulse

### The clean tech revolution: The zero-fuel airplane

Swiss pioneers Bertrand Piccard (Chairman) and André Borschberg (CEO) are the founders, pilots and driving force behind Solar Impulse, the first aircraft able to fly day and night without a drop of fuel – propelled solely by the sun's energy. With the Si2 aircraft, they will attempt the first Round-The-World Solar Flight in 2015. Supported by Main Partners Solvay, Omega, Schindler, ABB, and Official Partners Google, Altran, Bayer MaterialScience, Swiss Re Corporate Solutions, Swisscom and Moët Hennessy, this historic first aims at demonstrating that clean technologies can achieve the impossible.

After the original Solar Impulse Si1 prototype which holds 8 world records, Si2 engineers have designed and constructed a new single-seater aircraft made of carbon fiber. It has a 72 meter wingspan (larger than that of the Boeing 747) for a weight of just 2,300 kg, equivalent to that of a car. The 17,248 solar cells built into the wing supply electric motors (17.5 CV each) with renewable energy. The solar cells recharge four lithium polymer batteries totaling 633 kg each, which allow the aircraft to fly at night. This unlimited autonomy has been proven on July 3rd, 2015, when Si2 landed in Hawaii after flying 5 nights and days without fuel from Japan, breaking the world records of distance and duration for solar aviation, as well as the world record for the longest solo flight ever, (117 hours and 52 minutes - around 7,200 km. These world records are currently under ratification by the International Aeronautical Federation.

For more information, connect with Solar Impulse: [www.solarimpulse.com](http://www.solarimpulse.com)



## Download the Solar Impulse Official App here:

<https://play.google.com/store/apps/details?id=com.wisekey.wisefans.solarimpulse&hl=en>

<https://itunes.apple.com/us/app/solar-impulse-hd/id963638162?mt=8>

Information on Solar Impulse's chairman and co-founder Bertrand Piccard, is available at:

[www.bertrandpiccard.com](http://www.bertrandpiccard.com)



Information on Solar Impulse's CEO and co-founder André Borschberg, is available at:

[andreorschberg.com](http://andreorschberg.com)



For more information, connect with Solar Impulse: [www.solarimpulse.com](http://www.solarimpulse.com)

OFFICIAL PARTNERS



HOST PARTNERS

