AIRBUS ZEPHYR SOLAR HIGH ALTITUDE PSEUDO-SATELLITE FLIES FOR LONGER THAN ANY OTHER AIRCRAFT DURING ITS SUCCESSFUL MAIDEN FLIGHT

News / Manufacturer

- **Touch down after 25 days, 23 hours, and 57 minutes**
- **System capabilities demonstrated**
- **Maiden Flight objectives achieved**

Airbus Defence and Space announced the successful landing of its first production aircraft of the Zephyr programme, the new Zephyr S HAPS (High Altitude Pseudo-Satellite). After taking off on 11th July in Arizona, USA, Zephyr S logged a maiden flight of over 25 days, the longest duration flight ever made. An application has been made to establish this as a new world record. This maiden flight of the solar powered Zephyr S proves the system capabilities and achieved all the flight's engineering objectives.

The previous longest flight duration record was also logged by a Zephyr prototype aircraft a few years ago, achieving then more than 14 days continuous flight, which already was ten times longer than any other aircraft in the world.

This new record flight was supported by the UK government and reflects the UK Ministry of Defence's position as the first customer for this innovative and potentially game changing capability.

Zephyr is the world's leading, solar–electric, stratospheric Unmanned Aerial Vehicle (UAV). It harnesses the sun's rays, running exclusively on solar power, above the weather and conventional air traffic; filling a capability gap complimentary to satellites, UAVs and manned aircraft to provide persistent local satellite-like services.

"This very successful maiden flight represents a new significant milestone in the Zephyr programme, adding a new stratospheric flight endurance record which we hope will be formalised very shortly. We will in the coming days check all engineering data and outputs and start the preparation of additional flights planned for the second half of this year from our new operating site at the Wyndham airfield in Western Australia" said Jana Rosenmann, Head of Unmanned Aerial Systems at Airbus.

Zephyr will bring new see, sense and connect capabilities to both commercial and military customers. Zephyr will provide the potential to revolutionise disaster management, including monitoring the spread of wildfires or oil spills. It provides persistent surveillance, tracing the world's changing environmental landscape and will be able to provide communications to the most unconnected parts of the world.

The original target mission of the Zephyr is to provide local persistence at an affordable price with a re-usable solar-powered aircraft, providing a wide scope of applications, ranging for example from maritime surveillance and services, border patrol missions, communications, forest fire detection and monitoring, or navigation. Operating in the stratosphere at an average altitude of 70,000 feet / 21 kilometers, the ultra-lightweight Zephyr has a wingspan of 25 meters and a weigh of less than 75kg, and flies above weather (clouds, jet streams) and above regular air traffic, covering local or regional footprints.

Ideally suited for "local persistence" (ISR/Intelligence, Surveillance & Reconnaissance), the Zephyr has the ability to stay focused on a specific area of interest (which can be hundreds of miles wide) while providing it with satellite-like communications and Earth observation services (with greater imagery granularity) over long periods of time without interruption. Not quite an aircraft and not quite a satellite, but incorporating aspects of both, the Zephyr has the persistence of a satellite with the flexibility of a UAV. The only civil aircraft that used to fly at this altitude was Concorde and only the famous military U2 and SR-71 Blackbird could operate at similar levels. The Zephyr successfully achieved several world records, including the longest flight duration without refuelling (more than two weeks, 14 days, nearly 340 hours, that is ten times longer than any other aircraft in the world), as well as very high altitude flights (70,740ft/ 21 Kilometers).

Image not found or type unknown

09 AUGUST 2018

ARTICLE LINK:
https://50skyshades.com/index.php/news/manufacturer/airbus-zephyr-solar-high-altitude-pseudo-satellite-flies-for-longer-than-any-other-aircraft-during-its-successful-maiden-flight