

EXPLORING AN INDUSTRY DRIVEN BY IoT:

How could aircraft repairs look like in the future?

1 In-air detection of malfunctioning part

An aircraft is in-flight when a part automatically recognises it's about to fail. The aircraft generates an alert received by the operator and the maintenance teams on the ground.

2 Supply chain integration

The part will need to be replaced upon landing. While the aircraft is still in air, a 3D printer, located close to where the plane is set to land, receives a signal to print the part.

3 Delivering the part with autonomous technology

Once the part is printed, it's transported via an autonomous vehicle to the repair station. By the time the aircraft lands, maintenance teams are ready to carry out the repair, with the new part in hand.

4 A connected technician uses smart glass technology and AR to assess the issue faster and more efficiently

The mechanic, wearing heads-up display glasses, can use reference docs pulled from the cloud. Through a tablet-connected borescope, he can stream the repair process live to an engineer who can offer input remotely. The aircraft doesn't need to be taken out of service and is on track for its next flight.

Source: Deloitte

Satair is a truly global company and world leader in the commercial aerospace aftermarket. The company supports the complete life cycle of the aircraft with a full and integrated portfolio of flexible, value-adding material management products, services and tailored support modules across all platforms.

