

Temporary Climate Solutions: Keeping your asset healthy even when it's not in service

When an aircraft is removed from service for any period of time, either due to the current extraordinary circumstances of COVID-19 or as part of a planned maintenance programme, it is vital to protect it from potentially harmful environmental conditions.

Polygon works with multiple aircraft leasing companies and operators to achieve and maintain optimum environments for aircraft in storage. Polygon has experience of creating the right fuselage environments for many aircraft types including Boeing 737's, Airbus A320's, A330 and others.

Problem

Aircraft can be held in storage, sometimes for long periods of time, and many of them do not have any onboard climate control. This can create an environment that promotes mould growth as well as a greatly increased risk of condensation occurring. The aircraft interior can significantly degrade in a short space of time if action isn't taken. This can lead to extensive cleaning processes to remove mould or other contaminants before the aircraft can be put back into normal service.

Our experience tells us that protection of the aircraft's engines, APU and cockpit is a key area of focus for temporary climate control.



Solution

Polygon Temporary Climate Solutions provides a service to create and maintain the right environment on board such aircraft.

Polygon experts liaise with the customer's engineers to fully understand and assess the problem and then provide the most effective solution. Typically, an examination is undertaken inside the fuselage, APU and cockpit to confirm the proposed solution.

Equipment will be installed in the fuselage, APU and cockpit to ascertain the required levels of control. Polygon's equipment reduces the moisture content of the air, drying the environment. By placing remote monitoring sensors in different positions within the fuselage, Polygon is able to control conditions and preserve the quality of the cabin interior. The live-time conditions are constantly available on a web-based platform. By setting pre-defined environmental condition limits, warnings can be automatically sent to all parties should conditions change.

Remote monitoring reports show the conditions recorded from each sensor on the aircraft. The conditions recorded are temperature, relative humidity and dew-point temperature. Dew-point temperature is monitored closely. If conditions reach the point where condensation can occur, this will allow mould to grow and corrode sensitive electronics.



