

Continued Airworthiness Notification

Subject: Contamination of Air Data Systems During Aircraft Parking and/or Storage due to the COVID-19 Pandemic.

Date: 30 July 2021

For the attention of: Approved Maintenance Organisations (AMO) and Aircraft Operators

Applicability: All parked aircraft, and specifically aircraft that have been stored due to the COVID-19 pandemic.

Purpose: This Continued Airworthiness Notification (CAN) is to provide safety information regarding the risk of contamination of Air Data Systems and also to encourage the concerned stakeholders to take action in accordance with the recommendations listed below

Recommendations:

- 1. AMOs are recommended to carefully follow the maintenance instructions for cleaning and inspecting the pitot static system during the return to service of aircraft, including new and recently updated guidance/recommendations from the TC holders and/or design approval holders. AMOs are also strongly recommended to consider the EASA Guidance on "Return to service of aircraft from storage in relation to the COVID-19 pandemic".
- 2. Aircraft Operators are recommended to raise flight crews' awareness on this potential issue by reminding them of the importance of:
 - conducting thorough pre-flight inspections of the pitot static system;
 - monitoring airspeed indications during the take-off roll and announcing any abnormalities, such as unusual airspeed trend or absence of airspeed indications (usually a pilot monitoring duty);
 - conducting the required coordinated airspeed checks during the take-off roll, ensuring that the airspeed indicators are in agreement;
 - aborting/rejecting take-off if an airspeed anomaly is detected; and
 - performing the related abnormal/non-normal procedure (e.g. "Airspeed Unreliable") in case abnormalities or disagreement are detected in flight.

Reference: EASA SIB 2020-14R1: Contamination of Air Data Systems During Aircraft Parking and/or Storage due to the COVID-19 Pandemic.

Should you have any questions, please contact
CAAT Airworthiness and Aircraft Engineering Department
Email: airworthiness@caat.or.th

EASA SIB No.: 2020-14R1



Safety Information Bulletin

Airworthiness – Operations

SIB No.: 2020-14R1

Issued: 22 July 2021

Subject: Contamination of Air Data Systems During Aircraft Parking and

/ or Storage due to the COVID-19 Pandemic

Revision:

This SIB revises EASA SIB 2020-14 dated 05 August 2020.

Ref. Publications:

EASA Guidance: Return to service of aircraft from storage in relation to the COVID-19 pandemic.

Applicability:

All parked aircraft, aircraft that have been stored namely due to the COVID-19 pandemic, continuing airworthiness management organisations (CAMOs), aircraft maintenance organisations (AMOs), and commercial air transport (CAT) operators and national competent authorities (NCAs).

Description:

The aviation world has been heavily hit by the COVID-19 pandemic and an unprecedented number of aircraft have been entered into Parking or Storage conditions. This situation has caused severe financial pressure on air operators, as well as on their service providers. Gradually, the travel restrictions in and between countries are being lifted and operators are preparing to resume passenger flights. This requires first of all that the aircraft that were put into storage for weeks or months, are being restored to an airworthy condition. The significantly reduced number of flights due to COVID-19 also means that aircraft spend more time on the ground between flights, whilst not entering into the requirements defined in the Parking / Storage tasks.

EASA has noticed an alarming trend in the number of reports of unreliable speed and altitude indications during the first flight(s) following the aircraft leaving storage, caused by contaminated air data systems. It has also been noticed that contaminated air data systems related events occur when the aircraft is parked for a time period of less than 48 hours or even in aircraft in transit and on the ground for periods of less than 12 hours.

This has led to a number of Rejected Take-Off (RTO) and Air Turn Back (ATB) events. Most of the reported occurrences concerned the accumulation of foreign objects, such as insect nests, in the pitot static system. This contamination caused obstruction of pitot probe and static port orifices, in some cases on multiple systems, even when the covers were installed. The risk of such contamination would increase, if the aircraft storage/de-storage procedures were not completely or improperly applied at the beginning, during or at the end of the storage period. Additionally, pitot probes are not always protected by covers during short duration parking, resulting in a greatly increased exposure to the risk of pitot probes contamination.



EASA SIB No.: 2020-14R1

Pitot static systems provide flight critical air data information, and it is very important that the maintenance instructions of the Type Certificate (TC) holders and/or design approval holders are strictly applied. Careful planning and application of all required maintenance and the required resources by the responsible organisations are essential.

At this time, the safety concern described in this SIB is not considered to be an unsafe condition that would warrant Airworthiness Directive (AD) action under Regulation (EU) <u>748/2012</u>, Part 21.A.3B, nor Safety Directive (SD) action under Regulation (EU) <u>965/2012</u>, Annex II, ARO.GEN.135(c).

Recommendation(s):

CAMOs and MOs are recommended to carefully follow the maintenance instructions for cleaning and inspecting the pitot static system during the return to service of aircraft, including new and recently updated guidance/recommendations from the TC holders and/or design approval holders.

If it is suspected that there could be contamination of the air data system/pitot static probes, CAMOs and AMOs should assess, if the maintenance instructions are adequate to the situation, contacting the TC holders and/or design approval holders for further instructions, as necessary.

The importance of protecting the pitot probes with covers even for a short duration parking should be highlighted. Operators, CAMOs, and AMOs should consider protecting the pitot probes with covers even for short-duration parking, together with review of pre-flight checklists and raising awareness among flight crews to check if air data system protective covers are removed prior to flight.

Operators are recommended to raise flight crews' awareness on this potential issue by reminding them the importance of:

- conducting thorough pre-flight inspections of the pitot static system;
- monitoring airspeed indications during the take-off roll and announcing any abnormalities, such as unusual airspeed trend or absence of airspeed indications (usually a Pilot Monitoring duty);
- conducting the required coordinated airspeed checks during the take-off roll, ensuring that the airspeed indicators are in agreement;
- aborting/rejecting take-off if an airspeed anomaly is detected;
- performing the related abnormal/non-normal procedure (e.g. "Airspeed Unreliable") in case abnormalities or disagreement are detected in flight.

Operators should also consider including the unreliable air data scenario into the operator's post-Covid re-qualification simulator programme. The Operator's policy on take-off briefings should be re-assessed to consider the issues highlighted in this SIB.

NCAs are recommended to inform, question, support and monitor the organisations under their safety oversight, and consequently to adapt their oversight of the above aspects, as necessary, during these particular circumstances.



EASA SIB No.: 2020-14R1

CAMOs and AMOs are also strongly recommended to consider the above referenced EASA Guidance on 'Return to service of aircraft from storage in relation to the COVID-19 pandemic'.

Contact(s):

For further information contact the EASA Safety Information Section, Certification Directorate, E-mail: ADs@easa.europa.eu.