

Preparing for a Safe Return to the Skies



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Aircraft that were parked or stored due to the impacts of the COVID-19 sanitary crisis are progressively returning to the skies. It is in this context that Airbus has already received several reports of rejected takeoff (RTO) and in-flight turn back (IFTB) events due to unreliable airspeed. All of these events had positive outcomes thanks to the actions of the flight crews. It does however illustrate the challenges for returning aircraft to flying, after they are parked or stored, and if the maintenance procedures are not followed in all cases.

This is why we take this opportunity to share all of the available Airbus information and industry guidelines that can support Operators to ensure their safe return to the skies.

This article is also available on safetyfirst.airbus.com and on the Safety first app for iOS and Android devices. It may be updated to add any new available information.



SOME WARNING SIGNS FROM THE FIELD

With the return to operations of some aircraft that were previously parked or stored due to the COVID-19 situation, Airbus received several reports of incidents that may have been caused by not applying all AMM/MP/AMP procedures for parking and storage or not completing all of the tasks required for returning an aircraft into service after Parking or Storage.

Several Air Data Issues were Reported

Since March 2020, 15 occurrences of rejected takeoff or in-flight turn back due to unreliable airspeed were reported to Airbus. Out of 15 events, 11 of these were confirmed to have occurred during the first flight following a period where the aircraft had been parked or stored. In comparison, Airbus has received an average of one reported event of probe obstruction on ground per month for the last two years. This shows a clear warning sign with this sudden increase of reported occurrences.

14 out of 15 reported events were caused by foreign objects obstructing the Pitot air pressure line.

It is important that the air data probes are covered for the entire time an aircraft is parked or stored. Flushing the air data pressure lines (in accordance with the AMM procedure) must be done if the aircraft was parked or stored for more than one month, even if the covers were in place the entire time. Flushing may even be required earlier. For example, aircraft parked for less than one month where certain conditions may cause contamination of the Air data pressure lines or obstructions in the Pitot probes, such as nesting insects, dust or sand. Further information can be found in the following publications.

- **ISI 34.11.00026** - "A320FAM and A330/A340 Pitot probes - Description, evolutions and maintenance recommendations"
- ["Pitot Probe Performance Covered on the Ground"](#) Safety first article published in 2016

The Importance of Following the Published Procedures

Warning signs from the field highlight the need to follow the published AMM/MP procedure for parking or storing aircraft, and also for the return into service of aircraft.

As an additional support for Operators, this article lists any information which was published by Airbus during the current COVID-19 sanitary crisis. It also recalls any materials already available with the objective of helping Operators to safely park or store their aircraft and subsequently ensure their safe return to operations.

"Out of 15 reported unreliable airspeed events during takeoff since March 2020, 11 of these were confirmed to have occurred during the first flight following a period where the aircraft had been parked or stored."

INFORMATION SHARED ABOUT PARKING & STORAGE

General Information

- **OIT 999.0019/20** - "Parking and Storage: Exceptional Procedures and Recommendations Related to COVID-19 Massive Grounding Situation"
- **A220 aircraft** - Airbus Canada "**AOM ref: CS-AOM-21-00-0001**"
- **OIT 999.0026/20** - "Scheduled Maintenance Clock Stoppage further to COVID-19 grounding situation"
- **Safety first article** - "[Aircraft Parking and Storage](#)"
- **Maintenance Briefing Note** - "Maintenance during aircraft storage"
- **Airbus Fast magazine #65** "Protecting precious assets" article
- **ISI 25.50.00115** - "Cargo Operations Guidance - Aircraft parked used as ULD storage"
- **Safety first article** - "[Preventing Violent Door Opening Due to Residual Cabin Pressure](#)"

Frequently Asked Questions on Parking and Storage

- **ISI 10.00.00016** - "FAQ Table of Content"
- **ISI 10.00.00001** - "When is it necessary to park or store an aircraft? Can an aircraft out of operation be maintained with the approved maintenance programme?"
- **ISI 10.00.00002** - "Where can I find procedures for the parking or storage of aircraft? Are they mandatory?"
- **ISI 10.00.00003** - "Is it necessary to park or store an aircraft before a scheduled maintenance check, a working party or a cabin refurbishing?"
- **ISI 10.00.00004** - "What can I do when the parking or storage period has expired?"
- **ISI 10.00.00005** - "Is it possible to remove parts from an aircraft in parking or storage condition?"
- **ISI 10.00.00006** - "How shall the due dates of the periodic ground checks be calculated?"
- **ISI 10.00.00007** - "How does a parking or storage period influence the scheduled maintenance?"
- **ISI 10.00.00008** - "Who shall I ask regarding any questions related to the engines and the APU?"
- **ISI 10.00.00009** - "How can Airbus support me regarding aircraft parking or storage?"
- **ISI 10.00.00010** - "What shall I consider if I request a "Technical Adaptation" document from Airbus to cover parking or storage deviations?"

Information and Exceptional deviation from Parking and Storage AMM/MP/AMP Procedures per Aircraft System

The Airbus design office and customer support teams developed and published some exceptional deviations from AMM/MP/AMP procedures that may be applied to address Operator difficulties and to cope with all of their needs due to the massive requirement to park and store aircraft in the context of the current sanitary crisis. The **OIT 999.0019/20** - "Parking and Storage: Exceptional Procedures and Recommendations Related to COVID-19 Massive Grounding Situation", which was sent to Operators, is regularly updated with new information regarding any approved deviations. Certain allowable deviations are also described in several ISI articles available for download on the AirbusWorld portal. This information was recently explained in Airbus Engineering Support webinars with Operators. The presentations used during these events are available in **ISI 10.00.00020** - "Webinar presentation & MoM".

Electrical System

- **ISI 24.00.00046** - "Electrical Power Generation & Distribution Systems: Recommendations for Parking & Storage during COVID19 period"

Flight Controls System

- **ISI 27.00.00098** - A320Fam - "Deviations to Parking and Storage Maintenance Procedures related to ATA 27 Flight Control Systems and associated components already covered by a TA"
- **ISI 27.00.00099** - A330/A340 - "Deviations to Parking and Storage Maintenance Procedures related to ATA 27 Flight Control Systems and associated components already covered by a TA"
- **ISI 27.00.00100** - A350 - "Deviations to Parking and Storage Maintenance Procedures related to ATA 27 Flight Control Systems and associated components already covered by a TA"
- **ISI 27.00.00101** - A380 - "Deviations to Parking and Storage Maintenance Procedures related to ATA 27 Flight Control Systems and associated components already covered by a TA"

Fuel System

- **ISI 28.00.00166** - "Fuel Parking and Storage Procedures deviation policy"
- **OIT 999.0053/19** ATA 28 – "Recommendation on the use of Kathon FP1.5 Biocide"

Hydraulic System

- **ISI 29.00.00213** - "Deviations from Parking And Storage AMM Procedures related to ATA 29"

Landing Gear System

- **ISI 32.00.00178** - "Deviations to Parking And Storage AMM Procedures related to Landing Gear"
- **ISI 32.00.00179** - "Deviations from Parking And Storage AMM Procedures"
- **ISI 32.40.00066** - "Wheels and Brakes Corrosion during Parking - request for feedback"
- **ISI 32.40.00067** - "Deviations to Parking And Storage AMM Procedures related to Braking and Steering Systems and associated components ATA 32-4X and 32-5X already covered by TA (A320)"
- **ISI 32.40.00069** - "Deviations to Parking And Storage AMM Procedures related to Braking and Steering Systems and associated components ATA 32-4X and 32-5X already covered by TA (A350)"
- **ISI 32.40.00070** - "Deviations to Parking And Storage AMM Procedures related to Braking and Steering Systems and associated components ATA 32-4X and 32-5X already covered by TA (A330/A340)"
- **ISI 32.40.00071** - "Deviations to Parking And Storage AMM Procedures related to Braking and Steering Systems and associated components ATA 32-4X and 32-5X already covered by TA (A380)"
- **ISI 32.41.00102** - "Mitigations to wheels removal requirement after parking / storage period exceeding 3 months / 12 weeks"

Lighting System

- **ISI 33.51.00004** - "EPSU batteries storage handling and charging procedure at installation on aircraft"

Navigation System

- **ISI 34.11.00026** - "A320FAM and A330/A340 Pitot probes - Description, evolutions and maintenance recommendations"
- ["Pitot Probe Performance Covered on the Ground"](#) Safety first article published in 2016

Pneumatic System

- **OIT 999.0037/20** - "ATA36 - maintenance actions & recommendations after long parking period"

Auxiliary Power Unit

- **ISI 49.00.00092** - "APU Parking Procedure deviation policy"

Engine System

- **ISI 71.00.00075** - "Engine / nacelle recommendations and acceptable deviations for parking/storage and return to service (RTS)"

SAFE RETURN TO OPERATIONS

“Keep trust in Air Travel” Initiative

The COVID-19 sanitary crisis has suddenly and deeply impacted air transportation. In this context, Airbus has reacted quickly and started to provide solutions to enable a safe return to operations whilst keeping the trust of passengers and crews returning to flying.

In response, Airbus launched the “Keep trust in Air Travel” program. The objective is to find the solutions that will enable Airlines to recover as quickly as possible from the current crisis and make passengers feel that they can safely come back on board an aircraft. The various themes of “Keep trust in Air Travel” cover how to keep trust in Airbus cabin and aircraft overall - for example: with seamless hygienic travel solutions in the cabin and how to contribute with governmental and regulatory agencies to keep trust in the overall transport system. This includes the time before entering an airport or an aircraft, how to accompany airports for even safer airport operations, or how to take into account psychological aspects to keep trust in air travel.

Several webinars have already shared “**Keep Trust in Air Travel**” project’s outcome and progress with Airlines and a Facebook Live event was hosted by Jean-Brice Dumont - Airbus EVP Engineering for Q&A with the travelling public. <https://www.facebook.com/airbus/videos/582384906021127/>

An illustrative video called, “**Cabin air flow and ventilation in an Airbus aircraft: how does it work?**” is also available on the Airbus Facebook channel. <https://www.facebook.com/airbus/videos/272008560615125/?vh=e>

Management of COVID-19

- **OIT 999.0008/20** - “ATA 21 – Virus Outbreaks - Novel Coronavirus (2019-nCov)”
- **ISI 12.00.00008** - “COVID-19 - Coronavirus / Cleaning & Disinfection / disinfectants products & procedures applicable to SARS-CoV2 (COVID-19) disinfection of aircrafts in operation”
- **ISI 21.00.00119** - “COVID-19 (CoronaVirus) and Middle East Respiratory Syndrome (MERS)”
- **ISI 00.00.00374** - “[PED] Usage of bluetooth SARS-CoV-2/COVID-19 tracking apps on AIRBUS commercial aircraft”

Cargo Operations

- **ISI 25.50.00117** - “Cargo / General Guidance To Covid19 Situation”

Cargo Transportation in the Aircraft Cabin

- **OIT 999-0033/20** - “Cargo Transportation in the cabin”
- **ISI 00.00.00370** - “How to transport cargo in the aircraft cabin during COVID-19 outbreak? communicated via **FOT 999.0028/20** Cargo Transportation in the Cabin”
- **Web Conference** - “Cargo Transport in Cabin - Latest Update/Current Airbus Solution” held on April 27, 2020. Presentation materials are

available on AirbusWorld in “Events” - “Conferences and forums” - “Flight Operations Web Conferences”.

Guidelines to Flight and Cabin Crews

- **ISI 00.00.00373** - “Keep Trust in Air Travel - Flight Operations - General Guidelines for Cockpit and Cabin Crews during SARs-COV-2 (Covid-19) crisis” communicated via **FOT 999.0039/20** “Keep trust in Air Travel - Flight Operations - General Guidelines For Cockpit And Cabin Crews During Sars-cov-2 (Covid-19) Crisis”
- **ISI 00.00.00377** - “Aircraft Return into Service - Flight Operations Guidelines” (to be published by end of June) announced via **FOT 999.0044/20** “Aircraft Return into Service - Flight Operations Guidelines”
- **Web Conference** - “Aircraft Return to Service - Flight Operations Guidelines” held on June 16, 2020. Presentation materials will soon be available on AirbusWorld in “Events” - “Conferences and forums” - “Flight Operations Web Conferences”.

Security

- **SIT 2020-011/01** - “Security Guidance for Aircraft Return into Service” to be published by the end of June.

Other References

ICAO Council Aviation Recovery Taskforce (CART)

<https://www.icao.int/covid/cart/Pages/default.aspx>

Includes: CART Report - Executive Summary

Guidance for Air Travel through the COVID-19 Public Health Crisis

IATA COVID-19: Resources for Airlines & Air Transport Professionals

<https://www.iata.org/en/programs/covid-19-resources-guidelines/>

EASA guidelines on the progressive restoration of transport services and connectivity

https://ec.europa.eu/info/sites/info/files/communication_transportservices.pdf

EASA COVID-19 Aviation Health Safety Protocol

<https://www.easa.europa.eu/document-library/general-publications/covid-19-aviation-health-safety-protocol>

EASA SIB 2020-02R4 - 07.04.2020

<https://ad.easa.europa.eu/ad/2020-02R4>

FAA SAFO 20009 - 11.05.2020

https://www.faa.gov/other_visit/aviation_industry/airline_operators/airline_safety/safo/all_safo/media/2020/SAFO20009.pdf

WHO Operational Considerations for managing COVID-19 cases or outbreak in aviation - 18.03.2020

<https://apps.who.int/iris/handle/10665/331488>

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The COVID-19 crisis has led to very significant challenges for the world and the commercial aviation sector in particular. With this in mind, it remains every aviation actor's duty to reinforce our collective vigilance, ensuring that together we can achieve a successful and safe return to flying.

Let us take these reported unreliable airspeed events with positive outcomes as an opportunity to remind all of us of the need for reinforced vigilance

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