

## COMMENT RESPONSE DOCUMENT

EASA PAD No. 19-154

[Published on 09 August 2019 and officially closed for comments on 06 September 2019]

### Commenter 1: Iberia – Carlos Marjaliza Fernández – 09/08/2019

#### Comment # 1

Due to the P/N change of the EHA/EBHA referred on this future AD and associated AIB SBs, I think some mention to the AD 2018-0141 should be done. In AD 2018-0141, the affected parts are defined as the ones listed on MOOG VSBs, so currently only affected to P/N -25 and not to -26.

We were informed by AIB that this new modification does not constitute terminating action for AD 2018-0141 and the MOOG VSBs effectivity will be revised to include P/N -26 as affected.

In our personal opinion, a mention to AD 2018-0141 in this new AD in these terms, may help operators and avoid any misunderstanding.

#### EASA response:

**Comment noted. To avoid any confusion, EASA will revise AD 2018-0141. Only the reference to the serial number should be used to identify an affected EHA with degraded insulation resistance in the direct drive solenoid valve (DDSOV).**

**No changes have been made to the revised PAD in response to this comment.**

### Commenter 2: Lufthansa Technik – Christoph Heinen – 21/08/2019

#### Comment # 2

In SBs A350-27-P033 and A350-27-P034, Airbus defines that in “Accomplishment Instructions” Section 3, paragraphs C (Procedure) and E (Test) are “required for compliance” to the AD. However, for accomplishment instructions Option 1 (Modification of the EHA ... on aircraft), paragraph E (Test) refers to the wrong MP as it requires the test after “installation of the inboard aileron EHA” A350-A-27-14-55-01ZZZ-720Z-A instead of “installation of the EM on aileron EHA” A350-A-27-14-55-A1ZZZ-720Z-A, which is a copy/paste error from Option 2 Tasks.



We have already requested Airbus to correct this paragraph, but Airbus does not plan this to happen before Q2/2020.

Our question to EASA:

Does EASA concur with Airbus, that paragraph 3.E (Test) is required for compliance with the AD? If not, could you please clarify with Airbus not to include such statements into SBs? We have seen in another example (EASA AD 2019-0123) that EASA position seems to be that only the actual modification part is an AD requirement but not the testing.

**EASA response:**

*Comment agreed. There is a mistake in the SB. When the operator replaces directly the EM of the EHA on the aircraft, the amount of testing required is lower compared to when the whole EHA is replaced. However the SB won't be updated before Q2/2020. Nonetheless, AIB has released SBIT-19-0062 on 26 AUG 2019 to clarify the mistake in the SB and propose an alternate solution through TA (e.g less testing). Consequently, the solution proposed by Lufthansa Technik to add SBIT 19-0062 in the definition of 'The applicable ATA 27 modification SB' is a good option to solve this issue. The revised PAD has been amended accordingly to make reference to SBIT-19-0062.*

**Commenter 3: Lufthansa Technik – Christoph Heinen – 28/08/2019**

**Comment # 3**

In addition to my previously sent comment and driven by the publication of Airbus SBIT 19-0062 I would like to raise the following:

Only in case that EASA does not exclude the testing from AD compliance as asked in my first request, could you please consider to add to "Definitions: The applicable ATA 27 modification SB:" the part sentence "including additional information provided by Airbus SBIT 19-0062"?

**EASA response:**

*Comment agreed. See EASA answer to Comment # 2 above.*

**Commenter 4: Delta Air Lines – Brandon Soileau – 09/09/2019**



**Comment # 4****Reference:**

- (A) EASA Proposed Airworthiness Directive: PAD No. 19-154, dated 09 August 2019
- (B) EASA AD No. 2018-0213R1 (superseded), dated 09 Nov 2018
- (C) Airbus Service Bulletin A350-27-P033 original issue, dated 11 June 2019
- (D) Airbus Service Bulletin A350-27-P034 original issue, dated 11 June 2019
- (E) Airbus Service Bulletin A350-27-P035 original issue, dated 11 June 2019
- (F) Airbus Service Bulletin A350-27-P036 original issue, dated 11 June 2019
- (G) Airbus Service Bulletin A350-31-P028 original issue, dated 17 Sept 2018
- (H) Airbus Service Bulletin A350-31-P029 original issue, dated 17 Sept 2018
- (I) Airbus Service Bulletin A350-31-P030 revision 1, dated 17 Sept 2018
- (J) Airbus A350 AFM TR 113 issue 1.0, approval date 17 Aug 2018

**SUMMARY**

Reference (B) AD was prompted due to a detected technical issue on an inboard aileron EHA, causing potential erroneous monitoring of those actuators. Consequently, in-flight loss of inboard aileron control may occur, which, due to the resulting drag, would lead to increased fuel consumption. This condition, if not corrected, when combined with one engine inoperative, could result in reduced control of the aeroplane. Reference (B) AD was issued to address this potential unsafe condition which required amendment to the applicable AFM and activation of an ECAM Temporary Change to update the procedures related to inboard aileron fault operations. Reference (A) proposed AD was released to mandate ATA 27 Service Bulletins which provides instructions for modification of affected parts. Reference (A) proposed AD supersedes reference (B) AD (while retaining the requirements), requiring modification of the affected parts, which allows removal of the operational procedure previously introduced by the AFM TR. Reference (A) proposed AD also prohibits (re)installation of affected parts.

**DELTA'S (DAL) COMMENTS**

EASA Proposed Airworthiness Directive: PAD No. 19-154

1. Within paragraph Reason: "For the reasons described above, this AD retains the requirements of EASA AD 2018-0213R1, which is superseded, and requires modification of the affected parts, which allows removal of operational procedure previously introduced by the AFM TR."



Delta would like to inform EASA that none of the referenced Service Bulletins provides instructions for removal of the operation procedure previously introduced by the AFM TR.

2. Within paragraph Modification: “Note 1: Until the ETC activation be performed, as required per paragraph (3) of this AD, the AFM TR procedures, as required to be incorporated per paragraph (2) of this AD, prevail on procedures displayed of the ECAM.”

Delta believes Note 1 could be clarified with the following changes: “Until the ETC activation IS performed, as required per paragraph (3) of this AD, the AFM TR procedures, as required to be incorporated per paragraph (2) of this AD, TAKE PRECEDENCE on procedures displayed ON the ECAM.”

3. Within paragraph Credit: “An aeroplane on which Airbus modification (mod) 113758 and mod 113759 have been embodied in production is compliant with the requirements of paragraphs (1) and (3) of this AD for that aeroplane.”

In order to ensure that the operators get credit for mod 113758 and mod 113759 retrofits, and to ensure that later software standard updates also are credited, Delta believes this paragraph should be written as follows: “An aeroplane on which Airbus modification (mod) 113758 and mod 113759 have been embodied in production, or retrofitted later through service bulletin modifications A350-31-P030 and A350-31-P029 (or any later software standards), is compliant with the requirements of paragraphs (1) and (3) of this AD for that aeroplane”.

4. Within paragraph AFM Change: “After modification of an aeroplane as required by paragraph (5) of this AD, the operational procedure of the AFM TR is no longer necessary and can be removed from the AFM of that aeroplane.”

Delta would like to reiterate that there is no service bulletin that contains the instructions for removing the AFM TR from the ECAM. There is also no mention of a software update to allow for the removal of the AFM TR from the ECAM. Instructions for removal of the AFM TR code are required for compliance.

5. Within paragraph Ref. Publications: “Airbus SB A350-31-P030 original issue dated 17 September 2018.”

Delta would like to point out that the most recent version of this service bulletin is Airbus SB A350-31-P030 revision 1, dated 19 November 2018.

6. Within paragraph Reason: “Consequently, in-flight loss of inboard aileron control may occur, which, due to the resulting drag, would lead to increased fuel consumption. This condition, if not corrected, when combined with one engine inoperative, could result in reduced control of the aeroplane.”

Generally, ADs will be issued for safety concerns only. Per PAD 19-154, this issue alone will only cause an increase in fuel consumption; aircraft controllability is only a problem if this issue is coupled with an inoperative engine. Therefore, this issue is not a standalone safety concern. Furthermore, according to the ATA 27 service bulletins, the modifications are minor. Per the service bulletins, a minor modification is defined as “per EASA IR 21, a minor change is one that has no appreciable effect on the mass, balance, structural strength, reliability, operational characteristics affecting the airworthiness of the product. All other changes are major changes.” If there is no effect on the mass, balance, structural strength, reliability, or operational characteristics affecting the airworthiness of the product, coupled with this issue only affecting fuel consumption, then Delta does not think an AD should be issued as ADs should be reserved for issues impacting the safe operation of an aircraft.



Based on the above information, Delta Air Lines recommends that EASA request Airbus to revise, approve, and publish updated service bulletins (A350-27-P033, -P034, -P035, and -P036) to incorporate instructions for removal of the operational procedure introduced by the AFM TR in order to prevent the issuance of unnecessary AMOCs. Delta Air Lines also recommends that EASA revise the PAD to clarify the modification paragraph, add credit for operator embodiment of mods 113758 and 113759 (or later software batches) in the credit paragraph, and reflect the most recent revision of Airbus SB A350-31-P030 in the Ref. Publications paragraph.

**EASA response:**

1. *Comment agreed. Triggered by the occurrence of events with non-affected EHA, EASA have reconsidered and decided to retain the AFM TR for Group 2 aeroplanes. The revised PAD has been amended accordingly.*
2. *Comment agreed. The revised PAD has been amended accordingly.*
3. *Comment not agreed. The original AD 2018-0213 had this requirement, to be done within 6 months after 15 October 2018. Therefore all aeroplane should now be modified. A FWS software standard embodies ECAM displays and logics but this particular display (PRIM reset procedure) needs to be activated. This activation is done by MOD 113758 (or SB A350-31-P030). This activation step is thus mandatory. But once this step is passed, the activation is memorized in non volatile memory and any further FWS standard can be stacked. No changes have been made to the revised PAD in response to this comment.*
4. *Comment agreed. See EASA answer to Comment # 4 (1.) above.*
5. *Comment noted. It is true that this SB has been revised but as stated in the AD “The use of later approved revisions of the above-mentioned documents is acceptable for compliance with the requirements of this AD.”. No changes have been made to the revised PAD in response to this comment.*
6. *Comment not agreed. IB aileron EHA failure combined with one engine inoperative, could result in reduced control of the aeroplane. No changes have been made to the revised PAD in response to this comment.*

