

COMMENT RESPONSE DOCUMENT

EASA PAD No. 19-116

[Published on 05 July 2019 and officially closed for comments on 30 August 2019]

Commenter 1: Qantas Airways – Wayne Nelson – 20/07/2019

Comment # 1

QANTAS recently received the attached Proposed AD. On reviewing the subject PAD QANTAS would like to provide the following provisional comments:

- A. The source document referred to in the PAD, SB A380-57-8263 is currently in draft and is therefore not available for review in line with the PAD content.
- B. There is no reference in the PAD to credits for inspections carried out prior to the release of SB, confirming that such inspections are acceptable for compliance to the initial (threshold) inspections as specified in requirement 1 of the AD. At this time QANTAS has completed inspections on two of the affected MSN's listed in Appendix 1 (0014, 0015) of the PAD. All inspections have been carried out in accordance with AIRBUS TA, TD and Repair Drwg instructions. QANTAS were advised by AIRBUS that the above inspections would be considered and credit given at the time of AD action, hence your consideration of the above comments and appropriate changes to both the subject PAD and SB (as applicable), would be greatly appreciated.

EASA response:

- A. Comment noted. The SB was published 23 August 2019, one week before PAD consultation period expiry.**
- B. Comment noted. It is EASA understanding that, at the time of Final AD issuance, Airbus will apply for an AMOC on behalf of affected operators to obtain the necessary credit for actions previously accomplished per Airbus TA, TD and Repair.**

No changes have been made to the Final AD in response to this comment.

Commenter 2: Emirates Airlines – Shoaib Rehmatullah – 21/07/2019**Comment # 2****References:**

/1/ EASA Proposed Airworthiness Directive (PAD) 19-116, Dated -5-Jul-2019

/2/ SB A380-57-8263 (to be issued)

Emirates Airlines is in receipt of Ref. /1/ PAD. After review of its contents and in absence of Ref. /2/ SB, we have following comments and queries for EASA and Airbus Airworthiness Office to review:

- A. It is our understanding that the stated crack findings on the Wing Outer Rear Spar on in-service A380 aeroplanes is related to Environmentally Assisted Cracking (EAC) phenomenon. Please confirm?
- B. Two of our A380 aircraft A6-EDF (MSN 0007) and A6-EDJ (MSN 0009) were inspected in Sept 2018 and Mar 2019, respectively.
 - On MSN 0007, inspections covered the entire wing spars, i.e. LH & RH Wings' Upper and Bottom Flanges of Front, Centre and Rear Spars.
 - On MSN 0009, inspections excluded entire Centre Spar, Inboard Rear Spar between Ribs 1 thru 14, Mid Front and Rear Spars between Ribs 15-32, and Mid Front Spar between Ribs 33-38.
 - (a) The inspection scope reduction from MSN 0007 to MSN 0009 is understandable due to no previous crack findings in the omitted areas. However, the PAD inspection requirements are further reduced only to LH & RH Wings' Rear Spar Upper and Lower Flanges between Ribs 33-49.
 - (i) There were crack findings observed on both aircraft at Inboard Front Spar between Ribs 1-14. Please advise why this area is not being inspected on remaining affected aircraft's wing sets?
 - (ii). Since all the three EAC conditions (i.e. susceptible material alloy, sustained stress in the ST direction, and ageing in a typical environment) are common on the omitted areas of Front and Rear Spars, are there any plans to introduce future inspection requirements for these areas?
 - (b) At present, majority of the repairs accomplished on both aircraft were simple stop drill repairs that are temporarily validated to an equivalent of 36 months. Even the specific spliced repairs accomplished are life limited to 36 months equivalent.
 - (i) How are stop drill repairs able to sustain structural integrity of the wing spars?
 - (ii) How many stop drills are allowed within any two ribs?
 - (iii) What will be the requirement for cracks that have propagated beyond the stop drilled hole?
- C. We understand that inspection threshold is age limited. However, is there any possibility of having a 4-6 months grace period on the required inspection threshold that would enable us to reach scheduled 12 year heavy maintenance checks and avoid special groundings?



EASA response:

A. Comment agreed and confirmed.

B. Comment noted. See EASA answer to Comment # 1, point B above.

C. Comment not agreed. The AD compliance time is 147 months, i.e. contains a 3 months 'grace' period, compared to the 12 years (= 144 months) basic compliance time. No special grounding should be warranted.

No changes have been made to the Final AD in response to this comment.

