

COMMENT RESPONSE DOCUMENT

EASA PAD No. 25-042

[Published on 10 March 2025 and officially closed for comments on 07 April 2025]

Commenter 1: Turkish Airlines – Korhan KARAGÖZ – 10/03/2025

Comment # 1

We believe that the comments proposed by Delta Airlines (Comment#5-C) and Lufthansa Technik (Comment#3-C) to PAD No. 20-120 for shop visit inspections are still not clear in the proposed AD. In perspective to the previous comments on PAD No. 20-120, please find our comment below to PAD 25-042, for your kind review.

SB 72-AK612 is still a requirement to inspect all engines in shop independent of their lives and engines could be inspected during a hospital shop visit below 2300 FC threshold reached e.g. at 300 FC since new. Proposed AD still constitutes inspection with an interval of 200 FC of the engine after an initial inspection performed refer to SB 72-AK612, even though the technically defined threshold of 2300 FC is not yet reached. A permission should be considered to be added to clarify that if an initial inspection refers to SB 72-AK612 performed during a shop visit below 2300 FC, should not initiate the repetitive inspection of 200 FC intervals until 2300 FC.

EASA response:

Comment not agreed. Neither the EASA PAD 25-042 nor its predecessors EASA AD 2020-0277 and EASA AD 2024-0167 require accomplishment of the IPC Rotor 1 Blade root inspection in accordance with the instructions of the Rolls-Royce TRENT XWB 72-AK612. The listed (P)ADs provide only credit for the IPC Rotor 1 Blade root inspection in accordance with the Rolls-Royce TRENT XWB 72-AK612 allowing the operator to benefit from that inspection. The intention of the Credit paragraphs is to provide a voluntary option (and not an obligation) to take into account accomplishment of the inspection in accordance with Rolls-Royce TRENT XWB 72-AK612 when it is beneficial for the operator. The first inspection (the initial inspection) required by the superseded AD 2020-0277 (and taken over by AD 2024-0167 and PAD 25-042) is due within the compliance time defined in the Table 1 of the PAD 25-042, i.e. within 2 300 EFC since the first installation of the blades in an engine.

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

Commenter 2: Lufthansa Technik AG – Rene SCHINKEL – 19/03/2025



Comment # 2

- (a) AD Paragraph (5) requires modification of engines within 7 years and 8 months after AD effective date iaw SB 72-AL099. From my understanding the crack initiation and propagation is driven by a cyclic mechanism. The calendar limit would drive engines with parts into the shops without a technical need for it and cause operational disruption and higher shopvisit costs than required for low utilization. Please reconsider to either define a qualifying shop visit (e.g. all engines with an Engine Check and Repair, Engine Refurbishment or Engine Overhaul) or a cyclic driven Threshold, e.g. 2300 FC or above as supported by RR analysis.
- (b) AD paragraph (6) currently defines to not de-modify an engine. Due to possible swaps of modules between engines in the fleet during shop visits it would be preferred to reword the paragraph to “After modification of a **module 32**, as required by paragraph (5) of this AD, or as specified by paragraphs (3) and (4) of this AD, do not install an affected part on that **module 32**.”

EASA response:

- (a) *Comment not agreed. The mandatory Terminating Action compliance time is driven by the EASA Initial Airworthiness and Environmental Protection (Regulation (EU) No 748/2012) 21.A.3B requirement to correct the unsafe condition with an appropriate corrective action. To restore an acceptable level of safety of the fleet a time bounded mandatory action proposed by the Original Equipment Manufacturer and approved by the Agency is required.*

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

- (b) *Comment not agreed. The intention of the paragraph (6) of the AD is to maintain the post-modification configuration at engine level and gradually reach the fleet safety level on an attrition basis, i.e. preventing reintroduction of the unsafe condition by installing on an engine a module 32 having pre-mod AL099 blades installed. To restore an acceptable level of safety of the fleet within the required compliance time, the Part Installation instructions, as defined in the paragraph (6) of the AD need to be maintained.*

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

Commenter 3: Delta Airlines – John Cox and Cecilia Teeuwen – 07/04/2025

Comment # 3

Reference:

- (A) EASA Proposed Airworthiness Directive: PAD No. 25-042, dated 10 Mar 25
- (B) EASA Airworthiness Directive: No. 2024-0167, dated 22 Aug 24



(C) Rolls-Royce Alert NMSB Trent XWB 72-AK633 Rev. 2, dated 19 Feb 25

(D) Rolls-Royce Alert SB Trent XWB 72-AL099 Rev. 1, dated 03 Mar 25

Commenter Request

Modify Ref (A) PAD, Required Action(s) and Compliance Time(s) paragraph, item (8) for clarity and to give credit for previously accomplished corrective action(s).

Request justification

Corrective Action (8) of the PAD appears to contain three discrepancies. The first is the omission of the word “date” from what should read “effective date of this AD”.

The second is the inclusion of the word “initial” in “initial requirements”. Delta believes that this verbiage does not clearly give credit for repetitive inspections accomplished per previous revisions of SB Trent XWB 72-K633. Deletion of the word “initial” would clearly indicate that credit is given for all inspections previously accomplished, whether initial or repetitive.

Additionally, Paragraph (8) does not give credit for corrective actions accomplished per previous revisions of SB Trent XWB 72-K633. Like Paragraph (7), Paragraph (8) should give credit for inspections and corrective actions accomplished per previous revisions of the SB.

List paragraphs that change; describe (nonobvious) changes

Required Action(s) and Compliance Time(s):

Delta proposes that Item (8) should read:

“Inspection(s) and corrective action(s) accomplished on an engine before the effective date of this AD in accordance with the instructions of the original issue or Revision 1 of Rolls-Royce NMSB TRENT XWB 72-K633 are an acceptable method to comply with the requirements of paragraphs (1), (2), (3), and (4) of this AD for that engine.”

EASA response:

Comment agreed. The wording of the paragraph (8) of the final AD have been amended accordingly.

