



## COMMENT RESPONSE DOCUMENT

EASA PAD No. 18-069

[Published on 09 May 2018 and officially closed for comments on 16 May 2018]

**Commenter 1: Neos SpA – Emiliano Ciani – 10/05/2018**

### Comment # 1

Reviewing the subject PAD we have noted that Credits are given for an ECI performed iaw CFM ESM at Revision 54 Incremental Change, Revision 55 (or later) on affected blades to comply with the AD requirements (that is fare) but no credit is given for the same actions taken iaw the same ESM revision before the effective date of this AD as acceptable AMOC with the initial requirements of paragraphs (1) and (2) of the AD. We believe, in consideration of the AMOC Approval 10065440 granted against AD 2018-0093-E, if accomplishment of SB 72-1019 and SB 72-1024 before the effective date of this AD are accepted as AMOC to this AD requirements, either the accomplishment of the ECI by the highlighted ESM revisions should be accepted. Can you confirm the above?

### EASA response:

***Comment noted: iaw paragraph (3) of the AD, an ECI inspection iaw CFM ESM at Revision 54 Incremental Change, Revision 55 (or later) is acceptable as alternative method to comply with the inspection requirement of the AD. An ECI inspection accomplished before the effective date of the AD is also acceptable, iaw the general statement “required as indicated, unless already accomplished”, which is at the beginning of the “Required Action and compliance time” section of the AD.***

***Based on the above, no AMOC is needed for inspection accomplished iaw the ESM at Revision 54 Incremental Change, Revision 55 (or later), irrespective of the date of that inspection.***

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

**Commenter 2: AEPS Co Ltd – Oleg Yevdokimov – 11/05/2018**

### Comment # 2



2A) Some engines have Blades CSN below 20000 and Engine CSN below 20000. Which means perform AD 20000 FC or 31.08.2018. But same Blades are mentioned in Appendix 1 or 2 and IAW SB 72-1033 R01 inspection has to be performed prior to 30.06.2018. When to perform inspection? Follow AD or more restrictive SB?

2B) SB R01 condition below is not clear.

By August 31st, 2018, perform any remaining initial Fan Blade dovetail ultrasonic inspection (from engines or Fan Blades not complied in paragraph 1 or 2) unless the Fan Blade flight Cycles Since New is known less than 20,000 flight Cycles Since New.

**EASA response:**

**2A) Comment noted: The fan blade group criteria is only applicable for engines having less than 30 000 FC, which blades have unknown number of FC. When the fan blades cycles are known, and less than 20 000, the inspection is required “Before exceeding 20 000 fan blade cycles, or within 133 days after 20 April 2018 [the effective date of EASA AD 2018-0093-E], whichever occurs later”, even for a fan blade which s/n is listed in Group A or B of SB 72-1033 R01.**

**2B) Comment noted: this comment is not at AD level. It will be forwarded to CFM International  
No changes have been made to the Final AD in response to these comments**

**Commenter 3: Lufthansa Technik – Markus Kleinhans – 14/05/2018**

**Comment # 3**

Please review the following in PAD No. 18-069:

3A) Definition of a “Serviceable fan blade”: You wrote “within last 3000 FC before installation”. Is that a typo and should read “within the last 300 FC before installation”?

3B) Paragraph (4): CFM56-7B S/B 72-1033 is missing. It could have already been performed before the effective date of this new AD, therefore, it should also provide credit.

3C) In Appendix 1, there is a group of engine with Engine FC at “20000 FC or more, but less than 30000” with “None” as the Number of engine Shop Visits. This group cannot exist as the first LLP has a maximum of 20000 FC since new and can only be replaced at a shop visit. “None” should be replaced by “1 or more”.

**EASA response:**

**3A) EASA confirm there is no typo. Please also note that S/B 72-1033 Rev 1 has been updated**



**3B) Inspection accomplished iaw CFM56-7B S/B 72-1033 before the effective date of the AD are accepted iaw the general statement “required as indicated, unless already accomplished”, which is at the beginning of the “Required Action and compliance time section” of the AD. Please also note that the definition of “S/B” does not specify a minimum revision: in other words, inspections accomplished iaw any revision of the S/B are adequate to accomplish the inspection requirement or the AD.**

**3C) Comment noted: Appendix 1 is designed to address any combination of conditions without “voids”**

**No changes have been made to the Final AD in response to these comments.**

#### **Commenter 4: Japan Airlines (JAL) – Shunsuke Yamaguchi – 16/05/2018**

##### **Comment # 4**

We review CFM56-7B SB 72-1033 Revision 1 after the SB was issued, and felt that the compliance of the SB Revision 1 is not easy to understand for operators who know the fan blades' cycles since new (JAL know the fan blades' cycles since new.), because compliance of cycles known blades and unknown blades are intermixed in same sentences.

In particular, it is difficult to understand the compliance when the cycles known fan blades are listed in SB Revision 1 Appendix Group A and Appendix Group B. We wonder whether our cycles known fan blades should be performed ultrasonic inspection by June 30th 2018 or before fan blades accumulate 20,000 cycles since new, because the compliance of the cycles known blade is not described clearly in the SB Revision 1. After the SB Revision 1 was issued, CFMI explained to operators that cycles known fan blades should be performed ultrasonic inspection before fan blades accumulate 20,000 cycles since new, even though the cycles known fan blades are listed in SB Revision 1 Appendix Group A and Appendix Group B.

On the other hand, the table of this EASA PAD No.18-069 Appendix 1 is good for us to understand the compliance, because that the table is simple. So, JAL wants EASA to continue to use this table to clarify the compliance between the cycles "known" blades and the "unknown" blades, when EASA issue the AD.

##### **EASA response:**

**Comment noted: See also EASA answer to comment 2A**

**No changes have been made to the Final AD in response to these comments.**



**Commenter 5: United Airlines – Jenalissa Hendricks – 16/05/2018**

**Comment # 5**

United Airlines accepts the proposed rule, but provides the following comments on EASA PAD No.: 18-069 as technical clarifications of the requirement **5A) Definitions: The S/B:** United Airlines requests clarification if the stated CFM56-7B SB 72-1033 is a specified revision level, or Revision Original and later revisions.

**5B) Required Action(s) and Compliance Time(s):**

**Inspection:** United Airlines requests clarification if the repetitive inspection intervals are 3000 Engine FC or 3000 Fan Blade FC.

Examples: CFM56-7B SB 72-1033 Revision Original, dated 20 April 2018, Paragraph 1.C.2. specifies, “Repeat the inspection per this bulletin **every 3,000 engine flight cycles** after the initial inspection”.

CFM56-7B SB 72-1033 Revision 1, dated 09 May 2018, Paragraph 1.C.6. specifies, “Repeat the inspection as per this bulletin **every 3,000 Fan Blade flight cycles** after the initial inspection”.

**5C) Appendix 1** – United Airlines proposes for the table to match that of the instructions contained in Paragraph 1.C. 1. through 4. of CFM56-7B Service Bulletin 72-1033 Revision 1, dated 09May2018.

**EASA response:**

**5A) Comment noted: inspections accomplished iaw any revision of the S/B are adequate to accomplish the inspection requirement or the AD See also EASA answer to comment 3B**

**5B) Comment noted: Repetitive inspections of a fan blade must be accomplished at intervals not exceeding 3 000 FC accumulated by that fan blade.**

**5C) Comment not agreed: the technical content of the Appendix 1 is consistent with the instructions provided by the SB. It is anyway EASA opinion that using a Table improves readability of the requirement. See also Comment 4**

**No changes have been made to the Final AD in response to these comments.**

