

## COMMENT RESPONSE DOCUMENT

EASA PAD No. 20-100

[Published on 29 June 2020 and officially closed for comments on 27 July 2020]

### Commenter 1: Japan Airlines – So Kozu – 07/07/2020

#### Comment # 1

"Affected AGB" in this PAD states "Accessory gearboxes (AGB), having Part Number (P/N) 335-300-110-0 (for CFM56-3 engines) or P/N 340-046-505-0 (for CFM56-7B engines).".

However, there is several AGB P/Ns prior to P/N 340-046-505-0 such as P/N 340-046-503-0 and P/N 340-046-504-0 for CFM56-7B engines.

In accordance with current EASA AD 2012-0209, it states "all serial numbers, not equipped with an AGB P/N 340-046-508-0 or P/N 340-046-509-0".

So, we understand all above P/Ns (340-046-503-0, 340-046-504-0, 340-046-505-0) are included.

Therefore, please add AGB P/N 340-046-503-0 and 340-046-504-0 when the AD is issued.

**EASA response: Comment agreed. PAD has been updated accordingly.**

### Commenter 2: Transavia – Maarten Slinger – 10/07/2020

#### Comment # 2

- Please consider to add the following to *Definitions: Affected AGB* in order to avoid any confusion or dispute with our local Authorities regarding the Part Number range.

(..) having Part Number (P/N) 335-300-110-0 (for CFM56-3 engines); **or P/N 340-046-504-0** or P/N 340-046-505-0 (for CFM56-7B engines).

**EASA response: Comment agreed. PAD has been updated accordingly.**

**Commenter 3: Titan Airways – Richard Clelland – 14/07/2020****Comment # 3**

Could you supply Clarification with ref to EASA AD 2012-0209 & EASA PAD 20-100 affected AGB Part numbers.

**EASA AD 2012-0209** is applicable to:

CFM56-3 engines all models, all serial numbers not equipped with an AGB  
Part Number (P/N) 335-300-112-0

**EASA PAD 20-100** is applicable to:

**Affected AGB:** Accessory gearboxes (AGB), having Part Number (P/N) 335-300-110-0 (for CFM56-3 engines)

Can you please clarify the AGB P/Ns that are affected as we have a P/N **335-300-109-0** installed on an engine so IAW AD 2012-0209 it is affected and requires modification but IAW the New EASA PAD 20-100 it is only P/N 335-300-110-0 that is affected so this AGB P/N 335-300-109-0 will not be covered IAW the new PAD.

I think the EASA PAD 20-100 needs to clarify all affected AGB P/Ns & Service Bulletins or have the same statement as the current AD 2012-0209 statement above for CFM56-3 Engines.

CFM/SAFRAN have agreed more clarification is required and they are raising a CSC case to highlight this issue with the EASA PAD 20-100.

**EASA response: Comment agreed. PAD has been updated accordingly.**

**Commenter 4: Delta – James Thompson – 21/07/2020****Comment # 4****Reference:**

(A) EASA Proposed Airworthiness Directive: PAD No. 20-100, dated 29 June 2020



(B) CFMI CFM56-7B Service Bulletin (SB) 72-0564 Revision 2 or later

(C) CFMI CFM56-7B Service Bulletin (SB) 72-0879 Revision 1 or later

### **SUMMARY:**

Reference (A) proposed CFM56-7B AD would require replacement of affected AGB with a serviceable AGB in accordance with the instructions of the applicable SB, References (B) and (C), no later than 31 December 2024. From 22 October 2012 and until the engine is modified, any maintenance task which involves the removal and re-installation of the AGB hand-cranking cover requires a second set of eyes to ensure the correct installation.

Reference (A) retains the requirements of EASA AD 2012-0209, which is superseded, but introduces a calendar date limit for AGB replacement.

### **DELTA'S COMMENTS**

A) Reference (A) requires AGB replacement no later than 31 December 2024. If it is a flight safety issue, why do CFM56-3s have until 31 December 2026 and CFM56-7s have until 31 December 2024? Delta requests that EASA consider delaying that due date for the CFM56-7s due to aircraft being parked for COVID-19 and unknown return to service dates **or making the limit based on flight hours or flight cycles after last shop-visit**. Additionally, there is currently no onwing modification procedure available.

B) Reference (A) states to 'replace each affected AGB with a serviceable AGB...' Delta recommends this verbiage be changed to 'replace or modify each affected AGB'. The current wording requires the modification of the engine by the replacement of the AGB and not the modification of the AGB.

C) Reference (A) requires that engines be modified per Reference (B) or Reference (C), however it does not specify which steps or paragraphs are required for compliance. Delta requests that CFMI revise Reference (B) and (C) to include Required for Compliance (RC) steps. Alternately, Delta would recommend removing 'in accordance with the instructions of the applicable S/B' and merely reference the S/B.

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

***A) Comment not agreed. Available data does not support the required change.***

***It has to be noted that the requirement to replace AGB during first qualifying engine shop visit is effective since October 2012 (for CFM56-7B engines) and March 2013 (for CFM56-3 engines), as required by EASA AD 2012-0209. It is expected that a limited number of engines, among those affected by EASA AD 2012-0209, still has to be modified. No changes have been made to the PAD in response to this comment.***

***B) Comment agreed: PAD has been updated accordingly.***

***C) Comment noted and forwarded to CFMI. No changes have been made to the PAD in response to this comment.***



**Commenter 5: United Airlines – Irene Ibrahim – 23/07/2020****Comment # 5**

Regarding EASA PAD 20-100, Page 2 of 4, Paragraph (2) stating the Required Action(s) and Compliance Time(s) "For Group 1 CFM56-7B engines: Not later than during the first qualifying engine shop-visit beginning after 22 October 2012 [the effective date of EASA AD 2012-0209], and in any case not later than 31 December 2024, replace each affected AGB with a serviceable AGB in accordance with the instructions of the applicable S/B." :

The SB 72-0564 Rev 8 does not contain instructions for on-wing accomplishment of terminating action AGB replacements, nor does it provide an alternate means of compliance such as providing pre-assembled modified Accessory Gearboxes. In light of this, and based on Engineering Judgement, the requirement to achieve fleet-wide compliance with SB 72-0564 Rev 8 by 31 December 2024 places undue and unreasonable Operational restraints on engines for which the subject risk of Maintenance Error leading to oil loss events is very effectively being mitigated via the current EASA 2012-0209 (and FAA AD 2013-26-01). Is there a technical reason based upon which the 31 December 2024 date was determined? And does this deadline assume that CFMI is making available to the operators the on-wing instructions for SB 72-0564?

As an alteration to the PAD, United Airlines is recommending that the PAD is made only applicable to dual effectivity aircraft configurations where both engines are pre- SB 72-0564; including aircraft in storage. In the current environment of reduced aircraft utilization, meeting the 31 December 2024 deadline is not realistic without limiting it to dual effectivity configurations until such time that procedures are in place for on-wing accomplishment; for flying aircraft and parked aircraft alike.

**EASA response:**

**Comment not agreed. See EASA answer to comment 4A. No changes have been made to the PAD in response to this comment.**

