



COMMENT RESPONSE DOCUMENT

EASA PAD No. 16-032

[Published on 29 February 2016 and officially closed for comments on 28 March 2016]

Commenter 1: easyJet – Graham Pearce – 01/03/2016

Comment # 1

We have received PAD 16-032 concerning an inspection of the 3- and 9-o'clock pivot fittings of thrust reverser c-ducts on CFM56-5A and 5B engines in accordance with Airbus SB A320-70-1003 rev 1 and would like to offer some feedback on the proposal in table 1 block B to mandate an inspection within 14 months or 3000 cycles after the effective date of the AD.

For context, easyJet has more than 100 C-ducts that would require compliance with table 1 block B.

The initial issue of with Airbus SB A320-70-1003 dated May 2014 provided instructions to inspect the affected parts in a workshop environment which would have been a significant burden to all airlines having to remove many c-ducts and send them to a workshop, which in many cases would have been very soon after the previous shop visit at which we performed several ALI tasks from the MPD. However, a revision was promised to provide instructions for inspecting on wing.

We have a programme of removing c-ducts for shop visit in order to achieve the MPD ALI and CPCP 10-year tasks which involves approximately 100 c-ducts per year, that being approximately one aeroplane set every two weeks. This aggressive but unavoidable schedule means that there is no capacity in our operation – and limitations on the workshop capability – such that we were not able to increase the programme to remove c-ducts that had already had their first shop visit to have a second one just to perform Airbus SB A320-70-1003 via UTAS SB RA32078-137.

Rev 1 of Airbus SB A320-70-1003 was released in December 2015, nineteen months after the original was issued, and this is the first time that a useable on-wing accomplishment document has existed.

The inspection involves specialist NDT capabilities, requiring us to contract a working party from a supplier with such capabilities, to visit each c-duct to perform and certify the work. However, if the compliance time of PAD 16-032 table 1 block 2 is upheld we would have only 14 months or 3000 cycles in which to arrange inspection of over 100 c-ducts, a large proportion of which timescale will be through the summer months when European airlines' flying programmes are at their busiest and with minimal downtime.

Note that airlines such as easyJet are totally reliant on third parties to perform the inspection as we do not have NDT staff. We anticipate that capable working parties are going to be in very high demand by other airlines having to rush to meet the PAD compliance timescale.

We feel that it is not reasonable to impose a timescale of 14 months on airlines, especially considering that we have been waiting for 20 months since May 2014 for a useable on wing document. But for the delay in issuing rev 1 of the Airbus SB we would have been able to start on wing inspections over a year ago which would have been adequate time to perform the work. The proposed timescale therefore penalises airlines for the delay in providing a useable on-wing technical publication.



Additionally it seems anomalous to mandate the inspection on all affected c-ducts within the same timescale, irrespective of age, considering that some have been in service since the aircraft with CFM56-5A were delivered in 1988 (more than 25 years) whereas others affected have been in service for less than half that period.

We request amendment of table 1 block B to a more reasonable timescale that takes into account airlines' operations to allow a further winter operation period, or a C-check interval of 24 months, both of which would provide adequate downtime for airlines to achieve the inspections on wing without the logistical burden that it would otherwise cause.

EASA response:

Comment agreed. Airbus has provided EASA with additional justifications allowing increased of the compliance time. Table 1 B has been modified accordingly. Airbus SB A320-70-1003 and UTAS VSB RA32078-137 will be also revised, including reference to the increased compliance time.

Commenter 2: Virgin America – Krista Dial –01/03/2016

Comment # 2

Review of this PAD and mandated service bulletins show the current UTAS SB is missing content as follows:

Section 3.A Item 1a of UTAS VSB RA32078-137 Rev 2 refers to Table 501 and Figure 502 for production delivered beam outer panel installation configurations. The outer panel assemblies identified in Table 501 for a CFM56-5B engine type are ALL200-600-6, ALL200-601-6, ALL200-602-6, ALL200-603-6, ALL200-604-6, and ALL200-605-6. According to the CFM56-5B Illustrated Parts List 78-32-36 Figure 8, all of these part numbers are for the LH Side beam assemblies (9 o'clock). The RH (3 o'clock) panel assemblies are not addressed.

Please note that this issue has already been communicated to both Goodrich (CV15-7997) and Airbus (dossier 80104835). The error was confirmed and a revision to the VSB is expected.

EASA response:

Comment noted: UTAS VSB RA32078-137 has been revised at revision 3 on March 14, 2016 to correct the errors and indicates missing P/N and range of affected Serial Numbers.

Commenter 3: Lufthansa Technik – Carsten Burk – 14/03/2016

Under the current given compliance time Lufthansa would need to inspect 160 Thrust reverser halves on wing. As we know, the inspection requires approx.. 16 Manhours, which makes the performance of this inspection during an overnight stop not possible. This requires plenty of special A/C downtimes which causes extrem high operational limitation respectively very high economic burden resulting out of that.



After issue of SB A320-70-1003 rev 00 in 07 may 2014, LHT already commented a draft PAD to find a solution to be able to inspect 3/9 pivot fitting on wing instead during shop visit related to the given grace period.

During CFMI all operators conference a solution to improve VSB RA32078-137 / SB AIB was presented.

Then SB A320-70-1003 revision 1 was issued to permit an inspection on wing approx. 2 years after initial release of the SB A320-70-1003. LHT Due to that, LHT could not begin the on wing inspection which goes equal to a loss of 2 years time period.

Summerizing:

Comment # 3a

LHT requests to increase the inspection threshold from 14 to 24 months and 3000 to 4500FC which is equal to a C-Check interval, which would give much better downtime planning opportunities and to decrease the economic and operational burden for the operators.

Comment # 3b

In Addition LHT would like to align the inspections with the corresponding ALI task limits 10 years / 12000 FC interval.

EASA response:

Comment #3a: See answer to comment #1.

Comment #3b: The question has been addressed to AIRBUS and UTAS that have confirmed that due to stress analysis results, the HFEC inspection interval of 5 years / 12,000 FC cannot be increased to match with some existing ALI/CPCP items (10 years / 12,000 FC)

Commenter 4: Air France – Patrick Dworianyn – 14/03/2016

- AFR FTR situation :
123 aircrafts / 520 half FTR concerned by the inspection including spare parts .
365 half FTR to be inspected within 14 months / 3000 FC : 77 in shop / 288 on wing

Comment # 4a

- Compliance time



Table 1 – Inspection Threshold

Compliance Time (whichever occurs later, A or B)	
A	Within 10 years or 24 000 FC, whichever occurs first, accumulated by the T/R since its first installation on an aeroplane
B	Within 14 months or 3 000 FC, whichever occurs first after the effective date of this AD

Since the beginning of issue of SB A320-70-1003 rev 00 i.e. 07 may 2014, Air France asked AIB to find a solution in order to be able to inspect 3/9 pivot fitting on wing instead during shop visit.

During second quarter of years 2014 Air France was involved to help Airbus to quickly find a solution and spent a lot of time to improve definition of VSB RA32078-137 / SB AIB.

Then SB A320-70-1003 revision 1 was issued to permit an inspection on wing nineteen months later. Unfortunately awaiting this new revision during this period, AFR was not able to begin the inspection on wing and today these 19 months are lost.

14 months or 3000 FC inspection threshold obliges AFR to create 29 aircraft specific slots (that means not included in C / L or D checks) to perform the inspection . In order not to create a big burden on aircraft operation, we request you to increase inspection threshold 14 months to 24 months and 3000 FC to 4500 FC which matches in fact to the C check interval. I remind you that for one aircraft we need a total of 16 manhours to perform the NDT inspection and C check time permit to carry out this work elapsed time.

Comment # 4b

- Threshold / interval inspection versus ALI / CPCP :

Since the beginning of Aircraft A320 operation, MRB ALI and CPCP items were mandatory and request to inspect the fan thrust reverser for cracks / corrosion detection. We do not understand why 3/9 pivot fitting HFEC inspection was not requested at that time (is it one forget from manufacturer?) .

ALI / CPCP and 3/9 fitting inspection threshold are in line with 10 years / 24000 FC but not the interval. AFR request to get the same 10 years / 12000 FC interval to make all inspections together.

Comment # 4c

- NDT inspectors :

During the grace period 14 months or 3000 FC we have to schedule inspection on 4 half FTR a week! HFEC inspection request a specific tooling and qualification for inspector. We have a small number of inspector able to perform such inspection and this matter has to be taken into account to perform the inspection on due time.

Comment # 4d



- Allowable damage Limits / spare part support :

Corrosion : Serviceable limits are available however we must replace 1/2 FTR by a spare one , perform inspection per option 1 in workshop (with outer panel removal) and corrosion repair iaw VSB .

Cracks (None allowed) ==> replace 1/2 FTR by a spare one before next flight and send it to workshop (at least 2 weeks turn around time) to replace the 3/9 pivot fitting .

If above inspection results happen several times, we will be driven by the shop turn-time, which will delay the programme badly. The pivot cannot be replaced on wing because the c-duct has to go into a "jig."

Spare part FTR or 3/9 pivot fitting : Neither Airbus nor Goodrich make spare part available for campaign inspection

EASA response:

Comment #4a: See EASA answer to comment #1

Comment #4b: See EASA answer to comment #3b.

Comment #4c: Comment noted and forwarded to Airbus. See also EASA answer to comment #1.

Comment #4d: Comment noted and forwarded to Airbus. See also EASA answer to comment #1.

Commenter 5: ALL NIPPON AIRWAYS (ANA) – Hideyuki Kato – 27/03/2016

Comment # 5

At first, Airbus issued SB A320-70-1003 Org (dated May 07/14) that the inspection should be done to removed thrust reverser from aircraft.

ANA reviewed and confirmed the procedure per SB A320-70-1003 Org was not reasonable for airline (prefer to shop maintenance).

Therefore, ANA had requested revised SB to AIRBUS.

At that time, AIRBUS commented that the SB would be revised by fourth Quarter of 2014. Almost operators were waiting for them. However, AIRBUS issues the revised SB on Dec 28/15.

During revision of SB, the compliance time was passed (Airbus used it).

ANA receives the PAD with the compliance time and confirm the compliance time is not enough to inspect per SB A320-70-1003 Rev.1.

And also, VSB RA32078-137 called by SB A320-70-1003, is not enough to do.

Because the S/N of thrust reverser are not identified AIRBUS.

When ANA contacted AIRBUS for the information of S/N a couple months ago, AIRBUS could not know the detail, and answer. After that ANA contacted UTAS to get detail.



Therefore, SB A320-70-1003 Rev.3 and Goodrich SB RA32078-137 are not enough.

ANA had already informed to AIRBUS to request correction of SB's.

Anyway, If issued AD, please wait until these are revised and also extend the compliance under AIRBUS issue (for postpone by AIRBUS.).

EASA response:

Comment partially agreed, table 1 B has been modified accordingly. See also EASA answer to comment #1 and comment #2.

