

COMMENT RESPONSE DOCUMENT

EASA PAD No. 20-115

[Published on 29 July 2020 and officially closed for comments on 26 August 2020]

Commenter 1: British Airways – Tom Eldridge – 31/07/2020

Comment # 1

With reference to paragraph (7), “Alternative Inspections for Group 2 and 3 aeroplanes”:

Table 3 requires that aeroplanes which have had no SDI previously accomplished on the affected area (which are all aeroplanes in groups 2 & 3, as the MRB task is a GVI), the SDI must be accomplished “Before exceeding 5 200 FC since the first external GVI as required by paragraph (2) or (4) of this AD, as applicable, or within 12 months after the first external GVI as required by paragraph (2) or (4) of this AD, as applicable, or within 36 months after the effective date of this AD, whichever occurs first”.

In particular, BAW would like to draw attention to the line which reads “within 12 months after the first external GVI as required by paragraph (2) or (4) of this AD, as applicable ... whichever occurs first”. BAW wishes to make the following comments in relation to said line:

- BAW notes that on the one hand, EASA will allow the first SDI within 36 months of the AD effective date, but on the other requires the SDI to be performed with 12 months of the first GVI (which has to be accomplished within 12 months of the last MRB or within 2 months of the AD issue date). As such, no aircraft would ever reach 36 months from the AD effective date. BAW further notes that the compliance requirement for an SDI within 12 months of the first GVI is only an option as contained within the Airbus SB at Rev 01 (ref SB Para(1)(E)(2), Table 2 – if no finding is found from the first GVI: Either do a GVI or an SDI in accordance with SB Table 3, or do an SDI within 12 months in accordance with SB Table 4). Considering that the inspection is to detect fatigue cracks, BAW additionally questions why there is a 12 month requirement. BAW therefore asks whether line A of PAD Table 3 should read “... whichever occurs later”?
- PAD Group 2 & 3 aircraft will all have been inspected by GVI either under the MRB tasks, or the 53-1472 initial GVI. The stipulation to perform the first SDI within 12 months places a very high operational maintenance burden on operators, with SDI inspections being required to be called outside of heavy maintenance checks. Furthermore, as EASA is aware, the current COVID-19 situation has resulted in mass-groundings of the global fleet, with a number of aircraft parked or stored in locations which do not have suitable maintenance facilities to perform the SDI. The 12 month requirement then places even greater maintenance burden on operators. With reference to SB Table 3, BAW understands that Airbus has substantiated the requirement

to inspect aircraft by GVI every 1300 FC until the SDI can be performed at the C-Check (upto 5200 FC / 36 months from SB/AD release), else Airbus could not have published the service bulletin Rev 01 allowing such a compliance. In addition, is BAW correct to understand from PAD Table 3 that EASA has data substantiating that aircraft can fly for 36 months after the effective date, prior to the first SDI, provided GVI is performed every 1300 FC?

Noting the Airbus & EASA compliance options, and taking into consideration the considerable additional maintenance burden the 12 month requirement places on operators in an already demanding commercial environment, can EASA please review PAD 20-115, Table 3, Line A, with a view to either removing the 12 month requirement, or to altering the requirement to "... whichever occurs later"?

EASA response:

Comment agreed. In paragraph (7), the 12 months compliance time has been removed from Table 3.

Commenter 2: Ruler's Flight Sharjah (SHJ) – Matthew Chelmicki – 04/08/2020

Comment # 2

SHJ has one aircraft which is within the applicability of the PAD which is an A319CJ (MSN 00910) which is just over 20 years since TOT and has 2,561FC/6,780FH. It is NOT in the applicability of the AOT A53N009-14, but is in the applicability of the SB A320-53-1214.

The MPD inspection 533133-01-7, which relates to A319 aircraft has not been performed (indeed, this MPD task, due IAW the MPD at 30,000FC is not applicable to our A319CJ aircraft, since the MP trigger point is 18,000FC) this therefore, would make it a Group 3 aircraft IAW the PAD.

The compliance time IAW the PAD for a Group 3 aircraft is stated as:

Within 2 months after the effective date of this AD, accomplish an external GVI per NTM 51-90-00 of the fuselage skin at section 15, milled pocket step above STGR 6, both LH and RH sides, in the upper skin panel from FR35 to FR47, in accordance with the instructions of the SB.

The ref SB at rev 01, states that the threshold for checking the AOT/SB applicability and subsequent work is 15,000FC, yet there no threshold mentioned in the PAD apart from the 2 month compliance statement above.

Table 3 states that an SDI can be carried out:

Before exceeding 5 200 FC since the first external GVI as required by paragraph (2) or (4) of this AD, as applicable, or within 12 months after the first external GVI as required by paragraph (2) or (4) of this AD, as applicable, or within 36 months after the effective date of this AD, whichever occurs first.

If neither GVI or SDI has been carried out, and the aircraft has less than 5200FC, does this mean that the SDI inspection can be carried out within 36 months (3 years) of the AD effective date?



SHJ believes that there should be clarification in the PAD as to the threshold for the initial GVI inspection as well as the SDI.

EASA response:

Comment agreed. Paragraph (4) of the final AD has been amended to refer to a compliance threshold of 15 000 FC.

Commenter 3: Virgin Australia Airlines – Raj Nunkoo – 05/08/2020

Comment # 3

OZW is currently reviewing PAD 20-115 and would like to have clarifications on the compliance times.

Background:

Airbus SB A320-53-1472 Rev.00 was issued on 17/12/19. One of our A320 aircraft MSN 00429

OZW carried out the GVI on 17/02/20 (with no findings).

Query:

1. As per Para. (10) of the PAD on Page 4, operators will need to perform the GVI over again as per Rev.01 of the SB within 2 months of the effective date of the AD. Can EASA confirm if any inspection done as per Rev.00 of the SB needs to be done again?

2. Once the GVI is done (with no findings), can EASA confirm when the DVI needs to be done?

Is it with 2500 FC from date when GVI was done or 12 Months from GVI?

3. We understand that the DVI has a repeat interval of 2500 FC.

Can EASA confirm if the GVI still needs to be done, if an operator has opted to perform the DVI every 2500 FC?

EASA response:

- 1. Comment agreed. Paragraph 10 of the final AD has been rephrased to give credit for inspections accomplished in accordance with the SB at original issue.**
- 2. Refer to amended paragraph (7) / Table 3 of the final AD. The first SDI is due within 12 months after GVI (as per paragraphs (3) and (5) of the AD), or, alternatively, if replaced by consecutive GVI, before exceeding 5 200 FC since the first external GVI as required by paragraph (2) or (4), or within 36 months after the effective date of the AD, whichever occurs first.**



3. A GVI is required once as a first inspection for Group 2 and Group 3 aeroplanes, as required by AD paragraphs (2) and (4). Thereafter, GVI inspection is an option to extend the SDI threshold (refer to AD paragraph (7)).

Commenter 4: United Airlines – Neil Sorensen – 10/08/2020

Comment # 4

United Airlines has the following comments for PAD 20-115:

1. Paragraph (2) and (4): SB A320-53-1472 R01 already refers to NTM 51-90-00 for the GVI procedure. Since there is no deviation between the SB and AD, please consider omitting reference to NTM 51-90-00 in the AD. This PAD does not refer to specific NTM procedures for the SDI since the SB provides that manual reference. Therefore, the NTM procedure for the GVI should not be needed to reference in the final AD.
2. We believe “within 12 months after the first GVI...” in Table 3 should be the grace period for Paragraph (3) and (5) SDI standard threshold instead. This would align with the SB compliance time tables. Note that 12 months after first GVI could become a maximum time of 24 months and 14 months for Group 2 and Group 3 aircraft, respectively. Table 3 also includes “within 36 months from AD effective date, whichever occurs first” but this limit cannot be reached; 12 months after first GVI (24 months or 14 months maximum from AD effective date) would come first before reaching 36 months from AD effective date.
3. Paragraph (7) and Table 3: The interval for the SDI is not clear. Table 3 is labelled “SDI Threshold” but it appears the second compliance time “before exceeding 5,200 since the last SDI accomplished on the affected area of that aeroplane” should be considered the SDI interval (every 5,200 FC).
4. Paragraph (10): Please add credit for an SDI in addition to the credit given for a GVI at SB original issue. We found no technical differences in the SDI procedures between the SB original issue and Revision 01.
5. Please consider consolidating Group 2 and Group 3 aircraft in a single group. Table 2 in the PAD could apply for either group. In the case for Group 3 aircraft, Table 2 – Compliance Time A would be the later time since the MRB GVI task was not performed within the last 12 months. Consolidating these groups could help simplify and reduce AD paragraphs.

EASA response:

- 1. Comment agreed. Reference to the NTM has been removed from the final AD accordingly.**
- 2. Comment agreed. In paragraph (7), the 12 months compliance time has been removed from Table 3.**



3. *The SDI threshold and interval are specified in paragraphs (3) and (5) of the final AD. Alternatively, consecutive GVI can replace an SDI as specified in paragraph (7) of the final AD, up to a maximum SDI threshold as defined in Table 3. The paragraphs have been rephrased for clarity.*
4. *Comment agreed. Paragraph 10 of the final AD has been rephrased to give credit for inspections accomplished in accordance with the SB at original issue.*
5. *Comment noted. Consolidating Groups 2 and 3 is not considered beneficial for the understanding of the AD, no change has been made further to this comment.*

Commenter 5: Air Canada – Jack Szeto – 11/08/2020

Comment # 5

Regarding PAD 20-115, Air Canada requests clarification on Compliance Time of Table 3 which states “Before exceeding 5 200 FC since the first external GVI as required by paragraph (2) or (4) of this AD, as applicable, or within 12 months after the first external GVI as required by paragraph (2) or (4) of this AD, as applicable, or within 36 months after the effective date of this AD, whichever occurs first”

Above Compliance Time is being interpreted as whichever occurs first of following 3 Scenarios:

- A. Before exceeding 5 200 FC since the first external GVI as required by paragraph (2) or (4) of this AD
- B. Within 12 months after the first external GVI as required by paragraph (2) or (4) of this AD
- C. Within 36 months after the effective date of this AD

Aircraft can never reach Scenario C (36 month after effective Date of AD) as GVI is required within 2 to 12 months per paragraph (2) or (4), and SDI is required within 12 months of GVI (per Scenario B). Can you please advise if Compliance Time of Table 3 should be interpreted differently?

EASA response:

Comment agreed. In paragraph (7), the 12 months compliance time has been removed from Table 3.



Commenter 6: Air France – Eric Luccantoni – 13/08/2020**Comment # 6**

During review of PAD 20-115, I have noted some differences in the applicability paragraph between the PAD and the SB and AOT. Applicability range is less detailed in the PAD than in the SB but it may be OK when crossing the data with applicable aircraft models. Nevertheless some MSN have been included in your PAD which are not concerned by SB/AOT requirements : MSN 1939-1991-2017-2051-2218 are not in SB effectivity. Can you please check and confirm PAD applicability.

EASA response:

Comment agreed. The applicability of the final AD has been amended to remove the above mentioned MSN, which are all out of service.

Commenter 7: Iberia – Irene Valdehita Cerdeiras – 21/08/2020**Comment # 7**

The SB A320-53-1472 Rev 1 provides the option (per compliance tables 3 & 4) to perform a GVI every 1300 FC and a SDI every 5200 FC, or if the repeat interim GVIs are not performed, to perform the SDI 12 months after the initial GVI required by the SB. This would allow the aircraft reaches its next heavy maintenance check (not exceeding 5200 FC from the GVI) where the SDI would be performed. However, the PAD Para (7) - Table 3 shows that the intention is to mandate that the SDI is performed 12 months after the initial GVI, regardless of whether repeat GVIs are performed. We believe that the PAD is more restrictive than the SB A320-53-1472 Rev.1 in not allowing the initial SDI to be performed after 5200 FC, provided the repeat GVIs are carried out.

EASA response:

Comment agreed. In paragraph (7), the 12 months compliance time has been removed from Table 3.



Commenter 8: Delta Air Lines – James Thompson – 24/08/2020**Comment # 8**

Reference:

- (A) EASA Proposed Airworthiness Directive: PAD No. 20-115, Dated 29JUL2020
- (B) Airbus Service Bulletin (SB) A320-53-1472 Revision 01, Dated 17JUL2020
- (C) Airbus Alert Operators Transmission (AOT) A53N009-14
- (D) EASA AD 2014-0278

SUMMARY:

In 2014, a 170 mm crack was found on an A320 aeroplane, located between FR36 and FR37, just above the STGR 6 lap joint, LH side. The crack had propagated along the pocket radius. Prior to this finding, the operator had reported noise in the affected area during several weeks.

This condition, if not detected and corrected, could lead to in-flight depressurization of the aeroplane, possibly resulting in injury to occupants.

To address the unsafe condition, Airbus published REF (C) to provide inspection and repair instructions. EASA then issued REF (D) which applied to a select range of MSNs for sampling purposes.

REF (D) required repetitive Low Frequency Eddy Current (LFEC) or High Frequency Eddy Current (HFEC) inspections of the pocket radii located between fuselage FR35 and FR40 above STGR 6 on both LH and RH sides.

After REF (D) was issued, it was determined that cracks can initiate and develop between FR35 and FR47, and REF (C) was revised to extend the inspection area accordingly. Additionally, it was determined that more aeroplanes are affected than the MSNs applicable to REF (D). For these reasons, REF (A) was published. REF (A) retains the requirements of REF (D), which is superseded, expands the Applicability and the affected area, and requires new inspection intervals.

Note, this PAD includes the following definitions:

- The AOT: Airbus Alert Operators Transmission (AOT) A53N009-14.
- The SB: Airbus Service Bulletin (SB) A320-53-1472 Revision (Rev.) 01.
- Affected area: Pocket radii located between fuselage frame (FR) 35 and FR47, above lap joint stringer (STGR) 6 on both left-hand (LH) and right-hand (RH) sides.



- Groups:

- Group 1 aeroplanes are MSN 0977, 1007, 1009, 1011, 1013, 1026 and 1030.
- Group 2 aeroplanes are those which are not Group 1 and on which maintenance review board (MRB) general visual inspection (GVI) task reference 533133-01-5, 533133-01-7 or 533133-01-8, as applicable, was accomplished during the 12 months before the effective date of this AD.
- Group 3 aeroplanes are those which are not Group 1 and on which MRB GVI task reference 533133-01-5, 533133-01-7 or 533133-01-8 was not accomplished during the 12 months before the effective date of this AD.

DAL does/did not own any MSNs specified in the Group 1 definition and was therefore not affected by REF (D). REF (A) does include DAL aeroplanes, and according to the group definitions above, DAL MSNs will be either Group 2 or Group 3 aeroplanes depending on the most last inspection accomplishment date.

DELTA'S COMMENTS

DAL has reviewed REF (A) and REF (B) and has the following comments about the proposed rule:

1. Paragraph (9) of Ref (A) states:

“For a Group 1 aeroplane that has been repaired before the effective date of this AD, following inspection as per the AOT, in accordance with the instructions of an Airbus Repair Design Approval Sheet (RDAS), accomplish the next inspection of each repaired area in accordance with the instructions of, and within the compliance time as specified in, the applicable RDAS.”

Paragraph (9) acknowledges that Group 1 MSNs previously inspected prior to the AD Effective Date may have required repair, which would be documented and approved via RDAS with required inspection methods/intervals that may be different from the inspection methods/intervals required by REF (A). This paragraph requires the operator to perform inspections on all Group 1 Aeroplanes that have been repaired before the effective date of this AD in accordance with an RDAS.

This inspection currently has a global fallout rate of 18%, so it is likely that some Group 1, Group 2, and Group 3 Aeroplanes will have findings and require an RDAS to document and approve corrective action and required future inspections after the AD effective date. In this case, the current wording of the rule does not mandate compliance with RDAS's issued for any 'Group' after the AD Effective Date.

DAL proposes that Paragraph (9) is revised to cover all aeroplanes which have been repaired in accordance with the instructions of an Airbus RDAS, following inspection per the AOT or the SB, prior to or after the AD effective date:

“For an aeroplane that has been inspected per the AOT or the SB either prior to or after the AD Effective Date and repaired in accordance with the instructions of an Airbus Repair Design Approval Sheet (RDAS), accomplish the next due inspection for each repaired area in accordance with, and within the time period after repair, as specified in Airbus RDAS, as applicable.”



As it is currently written, Para (12) allows operators to inspect MSN's meeting Para (9) criteria in accordance with the RDAS's prescribed inspection method and at the intervals specified in the RDAS; not per the methods/intervals required by REF (A). Per Para (12), this is only allowable if it is specified in said RDAS that the REF (A) inspections are terminated/no longer applicable.

As discussed above, Para (9) does not currently address all potential drivers for receiving RDAS's and consequently, Para (12) does not give any approval/allowances for operators to comply with RDAS future inspection methods/inspection intervals in lieu of those given in REF (A)'s (for the scenarios not currently addressed in Para (9)). This ultimately could require the operator to comply with the RDAS inspection method/interval and the AD inspection method/interval regardless of the verbiage in the RDAS – i.e. duplicate inspections are required where per an RDAS, the RDAS inspections only should be followed.

Therefore, in conjunction with the proposed revision to Paragraph (9), DAL proposes that Paragraph (12) is revised to also address the future inspection requirements in paragraphs (2), (3), (4), (5), (6), and (7).

“Accomplishment of inspection(s) on an aeroplane, as specified in paragraph (9) of this AD, does not constitute terminating action for the repetitive inspections of the repaired area as required by paragraphs (1), (2), (3), (4), (5), (6), and (7), as applicable, of this AD for that aeroplane, unless specified otherwise in the instructions provided by Airbus.”

2. Paragraph (11) states “None” under the “Terminating Action” header. This is directly contradicted by Paragraph (12) which allows the inspections required by REF (A) to be terminated if an RDAS is issued with instructions to terminate the AD required inspection method/intervals. Therefore, it is possible to have a terminating action specified in an RDAS.

DAL proposes that Paragraph (11) be deleted to avoid this contradiction.

EASA response:

- (1) Comment partially agreed. For inspections accomplished after the effective date of the AD, subsequent RDAS instructions are covered by Corrective Action paragraph (8): “If, during any inspection as required by paragraph (1), (2), (3), (4) or (5) of this AD, or as specified in paragraph (6) or (7) of this AD, any crack is found, before next flight, contact Airbus for approved repair instructions and accomplish those instructions accordingly.”**
Credit needs to be given for any inspections accomplished prior to the effective date of the AD which resulted in RDAS instructions. Paragraph (9) has been amended to refer to all Groups and to the initial issue of the SB.
- (2) Comment partially agreed. Terminating action paragraph (11) intended to cover all aeroplanes not previously repaired, whereas paragraph (12) referred to aeroplanes repaired before the AD effective date and covered by an Airbus RDAS. To avoid contradiction, paragraph (11) has been rephrased to cover all aeroplanes, paragraph (12) has been removed.**



Commenter 9: Cathay Pacific – Hyphen Choi – 25/08/2020**Comment # 9**

CPA / HDA have reviewed the PAD 20-115 and have comments regarding PAD Paragraphs (2), (4) & (10).

We have Group 3 a/c B-HSI (MSN 930) and B-HSJ (MSN 1253) performed the initial GVI inspection per SB A320-53-1472 Rev 00 on 31 Jan 2020 and 5 Feb 2020 respectively. We believe we can perform the next SDI inspection per SB A320-53-1472 Rev 01 SDI inspection at 2500FC after the last GVI inspection. EASA please confirm our understanding is correct.

If our understanding is right, we believe EASA should revise PAD Paragraph (10) as shown below.

Credit:

(10) For an aeroplane on which, before the effective date of this AD, a GVI has been accomplished in accordance with the instructions of the SB at original issue, accomplish the next inspection, SDI or GVI, as specified in paragraph (1), (2), (3), (4), (5), (6) or (7) of this AD, as applicable.

Paragraphs (2) and (4) are compliance requirement of initial inspection, not next inspection, they should be removed from Paragraph (10).

Accordingly EASA should add a new credit Paragraph to mention the GVI inspection per SB A320-53-1472 Rev 00 before the effective date of the AD can fulfil the Paragraph (2) and (4) initial inspection requirement.

EASA response:

Comment agreed. Paragraph (10) of the final AD has been amended to give credit for GVI accomplished before the effective date of this AD in accordance with the instructions of the SB at original issue. Paragraph (3) and (5) of the final AD have been rephrased to require the first SDI within 12 months after the GVI, unless alternative GVI are accomplished as specified in paragraph (7).

Commenter 10: Lufthansa Technik – John Donegan – 02/09/2020**Comment # 10**

Please find below LHT comments on PAD 20-115 relating to a clarification issue. Apologies for submission after the published end of comment period, due to the limited current working resources, including holiday period.

For Group 3 aircraft (Requirement 4) a time period of 2 months after the AD effective date for the external GVI is required. LHT believes this should be:



1. Before 15000 FC, or
2. Within 2 month after the AD effective date (whichever comes later).

SB A320-53-1472 provides for 15000 FC to determine the configuration of the aircraft (which "Group" per AD is applicable). The associated MPD tasks listed for Group 2 have very high inspection thresholds and will not yet be performed on several aircraft.

LHT requests the AD threshold for action on the aircraft for Group 3 aircraft to be clarified and to introduce a utilization based threshold for aircraft with low flight cycles (i.e. 15000 FC).

EASA response:

Comment agreed. Paragraph (4) of the final AD has been amended to refer to a compliance threshold of 15 000 FC.

