

COMMENT RESPONSE DOCUMENT

EASA PAD No. 20-047

[Published on 28 February 2020 and officially closed for comments on 27 March 2020]

Commenter 1: JORDAN AVIATION – Mustafa Shahin – 01/03/2020

Comment # 1

As per mentioned in Appendix 1 Aeroplanes MSN are mentioned for affected part, while the affected parts can move from Aircraft to another. Mention affected part with serial numbers as in appendix 2 in enough, suggesting remove appendix 1 to avoid confusing for future records.

EASA response:

Comment not agreed. The Group definition clarifies why the MSN of aeroplanes delivered with an affected part is provided. See also EASA answer to Comment #4B.

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

Commenter 2: AMECO – Zhao Guangyu – 04/03/2020

Comment # 2

A) Airbus eyes on the component level (barrel itself). In addition SBs do not cover the all the parts as this PAD mentioned. We notice VSB provides a more comprehensive list and further its affectivity is targeting on the assembly level.

AIR CHINA/AMECO proposal: We deem the list in VSB complete and consistent with PAD list. May we suggest to

*add VSB to EAD so as to cover all SNs in one list and do remain targeting on the component level(50-3751048-00) as PAD does. The reason for this is VSB is connected directly to the issue. And please push MBD to revise VSB to focus on the component level.

Or

*revise airbus SBs to cover all the potentially affected aircrafts (aircrafts in APPENDIX 1/3).



B) For parts installed when aircraft delivered, concessions disallow part transferring between aircrafts(sample attached) while Pad allows transferring as mention in Section 2, installation.

AIR CHINA/AMECO proposal: since EASA/Airbus has each point, may we suggest both sides to review consistency.

EASA response:

Comment partially agreed. At aeroplane level, the required actions can be accomplished i.a.w. Airbus SB only.

Anyway, Appendix 3 has been removed, limiting the definition of affected parts to those for which no concession was issued.

Commenter 3: Singapore Airlines – Soh Kian Ann – 04/03/2020

Comment # 3

With regards to PAD 20-047, can EASA provide the NLG Leg assemblies P/N which the affected NLG main fitting can be installed on? This clarification is necessary as SB A320-32-1492 which refers to SAFRAN LANDING SYSTEMS Service Bulletin No.580–32–3206 (for information on the main fitting replacement) has effectivity which mentions NLG Leg P/N 10-375902-001 thru -002 as affected P/N (see screenshot below). The Main Fitting P/N 30-3751061-00 thru -01 is provided in the SAFRAN SB and not the P/N 50-3751048-00 as stated in EASA PAD. Hopes EASA can provide clarification on the P/N that is affected.

LANDING GEAR - NOSE LANDING GEAR -
INSPECTION OF THE BARREL ASSEMBLY (MAIN FITTING)

1. Planning Information

A. Effectivity

(1) In-service unit affected:

(a) NLG Leg Part Number (P/N)

– 10-375902-001 thru -002.

(b) Barrel Assembly (Main Fitting) Part Number (P/N)

– 30-3751061-00 thru -01.

EASA response:

Comments Agreed. A note has been added in the definition of affected part providing clarification.



Commenter 4: Delta Air Lines – Neil Duggan – 26/03/2020

Comment # 4

Reference:

- (1) EASA PAD 20-047; dated 28 February 2020
- (2) Airbus SB A320-32-1492, Revision 00; dated 25 November 2019
- (3) Safran Landing Systems (F0189) VSB 580-32-3206, Revision 00; dated 25 November 2019
- (4) Safran Landing Systems (F0189) Component Maintenance Manual 32-27-92: Leg Structure Part Number 10-375002-000, Revision 03; dated 30 August 2019

SUMMARY: It has been reported that the oil, which is used in production to protect the NLG main fittings for transportation and storage, has not been properly removed before final heat treatment of affected parts, possibly generating sub-surface cavities during the heat treatment, with consequent detrimental impact on fatigue performance.

Ref (1) has been issued and the final rule will require accomplishment of Ref (2) for the replacement of affected components on wing, and in turn, accomplishment of Ref (3) to purge the discrepant parts from operator inventory.

Delta Air Lines respectfully submits the following comments regarding the subject proposed rule.

A. Ref. (1) definition of “Group 2 Aeroplanes”:

Group 2 aeroplanes are those that do not have an affected part installed. An aeroplane having an MSN not listed in Appendix 1 nor 3 of this AD is Group 2, provided the NLG main fitting on that aeroplane has not been replaced since aeroplane first flight.

While the intent is clear, the definition could be made more explicit regarding maintaining Group 2 status after a NLG change. Please accept the following suggestion:

Group 2 aeroplanes are those that do not have an affected part installed. An aeroplane having an MSN not listed in Appendix 1 or 3 of this AD is Group 2, provided the NLG main fitting on that aeroplane has not been replaced with an affected part serial number since aeroplane first flight.

B. Change the Ref (1) definition of “The applicable SB”: Airbus Service Bulletin (SB) A320-32-1492 and SB A320-32-1493, as applicable.

DAL notes that no SB revision level is specified. Please ensure the SB number, revision level and date issued is specified or, (preferred) state the SB number, revision level and date issued, and all subsequent revisions. This will avoid AMOC requests if or when the SB is revised in the future.



C. Ref. (1) paragraph (1): REPLACEMENT states the following: *For Group 1 aeroplanes: Before exceeding the applicable life limit as identified in Table 1 of this AD, replace each affected part with a serviceable part in accordance with the instructions of the applicable SB. Replacing an affected part with a serviceable part on an aeroplane, in accordance with the instructions of the applicable Aircraft Maintenance Manual, is an acceptable method to comply with this requirement for that aeroplane.*

Ref. (2) paragraph C. PROCEDURE, (1)(3)2 requires the following: *Install a new main fitting with a not affected SN: BARREL 50-3751048-00.*

Ref. (4) IPL which includes P/N 50-3751048-00 indicates a higher assembly called “Barrel Assembly” P/N 30-3751061-00, while the Ref (2) paragraph C. Procedure, (1) (3) 2 instruction requires installation of a new “main fitting” with a not affected SN. The use of both terms “Barrel Assembly” in Ref. (4) and “main fitting” in Ref. (2) introduce confusion as to what part requires replacement, especially considering that Ref. (3), which is referenced within the “Objective/Action” section of Ref. (2) replaces P/N 30-3751061-00 “Barrel Assembly” and makes no mention of P/N 50-3751048-00 “Barrel/Main Fitting”. Delta recommends the consistent use of “BARREL p/n 50-3751048-00” instead of other terms in the final AD rule. And that the final AD rule clarify any differences in terms used for the affected parts between the documents that are required for compliance to the AD.

In place of “in accordance with the instruction of the applicable SB”, the final rule should require replacement of affected parts by reference to the procedures within the applicable SB.

EASA response:

- A. Comment not agreed. The proposed note does not address properly the (theoretical) case of an aeroplane on which a NLG main fitting has been replaced multiple times since first flight. More practically, the target of that clause is to allow an easy identification of Group, simply by checking whether the NLG main fitting has ever been changed since a/c delivery. When a check of the NLG main fitting s/n is required, there would be no benefit.**
- B. Comment noted, but not agreed. Later SB revisions are already acceptable for compliance, as stated in “Ref. publications” section of the AD. No AMOC application is necessary for such actions.**
- C. See EASA answer to Comment #3.**

No changes have been made to the Final AD in response to points A. and B. of this comment.



Commenter 5: Air New Zealand – German Saravia – 27/03/2020**Comment # 5**

Please be advised 3 ANZ A320N are affected by the issue this AD addresses, 2 delivered with R-concession and 1 w/o. Refer to the table below for further details:

MSN	Reg.	Life limit Control Method
8833	ZK-NHC	Delivered with R-Concession
8803	ZK-NHB	
8715	ZK-NHA	Safran SB + Airbus SB + Airworthiness Directive

As per OIT ref. 999.0038/19 Rev 01, Airbus informs operators of the issue of Airbus SB A320-32-1493 requesting the replacement of impacted NLG Main Fittings (delivered prior April 2019 without R-Concession) before reaching the new life limit (12.200 FC) because of findings in a batch of 144 NLG main Fittings. Safran Landing Systems VSB 580-32-3206 Lists all affected S/N that were already in service or were delivered with R-Concessions.

AD's applicability is for 87 S/Ns of the 144 affected S/Ns.

Air New Zealand finds the difference in criteria to establish the applicability of this AD with the actual NLG main fittings affected by unsafe condition addressed by the AD to be a risk for operators. It presents a challenge for forward planning, equipment induction and traceability of affected S/Ns. Additional barriers to avoid a set for failure scenario is probably the best option always. Specially with the difficulty of tracking a problem in an assembly, with an AD and Airbus SB affecting MSNs, instead of the assembly itself. Moreover, it sets a double standard for the same unsafe condition, when the AD (as opposed to Airbus' and Safran's SBs, which recommend scrapping the Part) allows installation of an affected P/N provided it has not exceeded life limit.

EASA response:

Comment noted. See EASA answer to Comment #2.

