


<b>EASA</b>	<b>COMMENT RESPONSE DOCUMENT</b>
	<b>EASA PAD No. 14-177</b> <b>[Published on 19 December 2014 and officially closed for comments on 2 January 2015]</b>

**Commenter 1: Lufthansa Technik AG – Dennis Geipel – 19/12/2014**

**Comment # 1**

We would like to comment on Paragraph (4):

(4) From the AD effective date, in case a fuselage external skin (doubler) repair has to be accomplished, concurrently with accomplishment of the repair, update the post-repair inspection threshold(s) in accordance with the instructions provided in paragraph 4.1.1 of Airbus AOT A53N007-14.

To our understanding, this paragraph refers to both

1/ new installations of external doubler repairs on skin areas where no doubler repair has been previously installed and

2/ renewals of doubler repairs.

Concerning scenario 1/, we agree with the requirements as per paragraph (4) of this PAD.

Concerning scenario 2/, when installing a new doubler repair at a location where an external doubler repair has already been installed, paragraph (4) claims an update of the post-repair inspection threshold IAW par. 4.1.1 of AOT A53N007-14, counting “from repair embodiment”, thus not taking into account that the skin has already flown several flight cycles with the old doubler repair installed – and not taking into account that cracks have potentially already initiated in the fuselage skin under the previously installed doubler repair.

Therefore, we would like to propose to add paragraph (5) also considering that HFEC IAW A320fam NTM 51-10-08 is an adequate inspection scheme to confirm a crack-free fuselage skin – if the doubler is removed and the skin area is accessible from outside. Until now, HFEC is not an approved one-time inspection method (terminating action) according to AOT A53N007-14.:

“(5) If a fuselage skin external doubler repair on 1.2mm fuselage skin is renewed, on that repair location, before doubler (re-)installation accomplish a one-time HFEC inspection acc. NTM 51-10-08 in the cutout surrounding fastener area to fulfill the requirements of this AD and AOT A53N007-14.”

**EASA response:**

**Comments agreed.**

**EASA confirm that, if combined with doubler removal, a HFEC inspection (NTM 51-10-08) on the skin fastener holes can be used as an alternative to the inspection (LFEC or US) as specified in the Airbus AOT.**

**Nevertheless, please note that in case of findings, doubler life renewal can be done only with a cut-out of the whole area covered by the original doubler and installation of a completely new larger doubler. In case of nil findings, a larger doubler is anyway necessary, but the existing cut-out size can be**

***maintained. This can be done through Unlimited cut-out SRM or RDAS.***

***In addition, cracking does not occur on the usually expected crack location (fastener holes) but instead are likely to occur in front or in between two fastener holes. Therefore, the usually applied doubler life renewal actions of oversizing the fastener holes have no life renewal / damage removing effect.***

***An additional paragraph has been inserted into the revised PAD to take into account the alternative solution to the AOT requirements.***

**Commenter 2: Air France – Ludovic Mbara – 22/12/2014**

**Comment # 2**

AFR acknowledges the PAD N° 14-177 of 19/12/2014 and would like to provide you further comments below:

**1/ APPLICABILITY:**

As fatigue tests demonstrated that possible cracks should appear underneath repairs by doublers where fuselage skin cut-out is 1,2 mm thick on A320 Family that is why A319, A320 and A321 airplane are selected and concerned by this AOT.

AFR Question: Why A318 airplane are omitted in the effectivity of this AOT or PAD however the same repairs solutions used on A319 - A321 are also apply to A318? AFR has 18 A318 in its fleet and several among them had repairs in the affected area so we would like to know what instructions for those cases?

**2/ MAINTENANCE REVIEW RECORDS:**

From the publication of the AOT A53N007-14, AFR has checked all the existing repairs recorded through its repairs data bases and identified 52 affected airplane. Each the identified repair is covered by SDR therefore, action will be taken accordingly.

**3/ POST-REPAIR INSPECTION THRESHOLDS:**

For the next revision of the SRM, Post-Repairs inspection threshold should be added to avoid confusion.

**EASA response:**

***Point 1: Comment understood and agreed. A318 aeroplanes were not affected by AIRBUS AOT because the A318 leader is far from the repair life limit threshold. The PAD has been revised to expand the Applicability to add A318 all models. It is anticipated that a future Airbus SB, to replace the AOT, and/or next SRM revision will mention A318 to indicate a repair life limit. When the Airbus SB will be issued, further AD actions will be considered.***

***Point 2/: Comment acknowledged.***

***Point 3/: Airbus confirms that it will be introduced with future SRM revisions.***

***No changes have been made to the revised PAD in response to points 2/ and 3/ of this comment.***