


EASA	COMMENT RESPONSE DOCUMENT
	EASA PAD No. 13-133 [Published on 02 September 2013 and officially closed for comments on 30 September 2013]

Commenter 1: AVIANCA (Brazil) – Danilo Reis – 03/09/2013

Comment # 1

Item 1. Regarding the PAD 13-133, is not mentioned what is the procedure to be adopted if, based on available maintenance record analysis, the rudders are not affected.

Another point to be considered is the fact of this PAD does not include the information that the repair procedure was updated in February 2010 and therefore for repairs implemented after this date will not be necessary inspection.

Our suggestion:

Item 2. Instead of providing a period of four months to check the implementation of repairs, this AD should have the following effectivity note according to the SB A320-55-1041:

This Service Bulletin is applicable to rudders with the Serial Number (SN) TS-1001 to TS-1639, SN TS-2001 to TS-5890 and TS-5927.

This Service Bulletin is applicable to rudders with repairs on side shells which have been accomplished in accordance with an Airbus Repair Approval Sheet or SRM procedure older than SRM February 2010 revision or in the case of a rudder originally fitted on one aircraft (refer to AIR delivery document) has been removed and installed on another aircraft.

Item 3. So the AD would not be applicable to rudders that were not repaired / replaced or if these procedures were performed after February 2010.

EASA response:

Comments partially agreed.

Item 1: *In case a rudder is found not to be affected, no corrective action is required. Please note that, in principle, an AD contains what is required and when, not what is not required.*

Item 2: *The Applicability of this AD is defined at aeroplane level, not at equipment (i.e. rudder) level. As affected rudders can be moved from one aeroplane to another, AD applies to all in-service aeroplanes, including those that may not need corrective action now. See paragraph (6) and (7) of the PAD specifically for this subject.*

Concerning the repairs, there are 2 criteria:

- *Rudder S/N identified in the AD were in service prior to SRM figure deactivation. Please note that repair performed before their entry into service (if any) is not impacted by SB A320-55-1041. Paragraph (5) of the AD confirms that rudders with certain other SN do not need to be inspected if the operator can demonstrate that no repairs have been performed in service. Related to Items 1 and 2 of this EASA response, this AD has to take all repaired rudders*

into account, another reason making it impossible to define the Applicability only for aeroplanes with a rudder in the SN batch given in SB.

- *Identifications of potentially affected repairs performed in service has to be done. This is the aim of the 4 months compliance time specified in paragraph (1) of the AD.*

Item 3:

- *The AD does not require action on rudders which were not repaired, determined as required by paragraph (1) of the AD,*
 - *There is no active SRM procedure since February 2010. Only specific SRM procedures (composite repair) have been deactivated since February 2010 (see figure A-GBBAA or A-GBCAA in SB A320-55-1041). In addition, since August 2013 revision (rev. 102), some new procedures and ADL have been introduced in the SRM (SRM 55-41-13 PB101).*

Paragraphs (5) and (6) have been amended in the Final AD, as the affected rudders must comply with paragraph (1) – determination that no repair has been done after delivery.

Commenter 2: Lufthansa Technik AG (on behalf of the German Air Force) – Raik Bauer – 19/09/2013

Comment # 2

Required Action(s) and Compliance Times

Item 1. Paragraph 4 states that after inspection in accordance with paragraph (2) or (3) “accomplish supplemental inspections and / or corrective actions in accordance with...the SB...”. We request to change the wording to add “or Airbus specific instructions”. We have already performed a similar inspection on A310 a/c and reported repair details to Airbus whereupon further actions were proposed by Airbus which were not covered by or deviated from the SB. It is essential that these instructions are also considered and deemed compliant with the airworthiness directive.

Item 2. Paragraph 5 - We are requesting to simplify the phraseology which currently uses a double-negative “Aeroplanes with a rudder...which is **not** in the range TS-...are **not** affected” to the positive phraseology used in the SB such as “Aeroplanes with a rudder...which is in the range...are affected”. For human factors reasons, a “positive” wording is less susceptible to misunderstanding. In the interest of safety and minimizing errors, we request EASA to evaluate the current policy used of a general inclusion of all aircraft models for the AD and later specifying the exceptions and choosing the wording especially carefully. It must be mistake-proof! If this change will not be implemented, we request at least using alternative words such as “rudder...outside the range...are *excluded* from...”. A not not situation is very undesirable.

Item 3. The rudders outside of the range given in Paragraph 5 cannot be excluded from the requirements of this AD, as proposed in the PAD. The EASA has made the condition that it must be ensured that even on these rudders, no repairs have been accomplished. This condition can only be met by doing the actions of either (1) or (3). There is no other way. Therefore, paragraph 5 has no added value, the AD steps (1) and/or (3) have to be performed as a minimum on ALL rudders, regardless of S/N.

Item 4. Paragraph 6 - The current version of paragraph 6 gives the impression that all rudder S/N which have been repaired in accordance with any SRM paragraph are affected by this paragraph. This is probably not the intention of the AD.

Please limit the wording of paragraph 6 to the affected rudder S/N only and SRM repairs affecting the rudder side shells.

Item 5. Paragraph 7 - The SRMs of the affected aircraft models have been revised to remove or de-active repairs. Paragraph 7 states that from the effective date of the AD no inactive SRM shall be applied to the rudder side shells. This statement implies that:

- it might be allowed to use inactive SRM repairs on other structural elements than rudder side shells
- the use of inactive rudder side shell repairs is allowed in general until the final AD clearly mandates not to apply them
- inactive repairs need to be covered by an AD in order to mandate their status as being inactive

As this is not the intent of the AD, it is kindly requested to amend the wording for more clarity or to completely delete Paragraph 7 as it does not contain any requirement not already existing.

EASA response:

Item 1: Comment accepted. Paragraph (4) of the Final AD has been amended accordingly.

Item 2: The AD is applicable to all aeroplanes. See also the EASA answers to Comment # 1 above.

Item 3: Comment understood but not agreed. Paragraph (5) of the Final AD has been slightly amended for clarity.

Item 4: EASA confirms that it is the intention of the AD that all rudders have to be investigated to determine if non-conforming repairs have previously been accomplished in service. This investigation is required by paragraph (1) of the AD. The AD should only be applicable to composite rudder side shell panels repair. The Final AD has been amended accordingly.

Item 5: The SRM is not a part of the certification, and even if in Europe, through Part M regulation, the use of the TC holder's instructions for continued airworthiness is required (and to be annually reviewed) to be included in the approved maintenance programme, this may not be the case in countries outside Europe. For this reason, the AD makes clear (to all ICAO contracting States) that the use of an old SRM procedure identified as unsafe is not to be used by any operator in the world. No changes have been made to the Final AD in response to this comment.

Commenter 3: Austrian Airlines – Erwin Fleberger – 27/09/2013

Comment # 3

1st comment: PAD 13-133 Para (2) requires inspection of repairs if affected in accordance with SB figures A-GBBAA or figure A-GBCAA. There is no limitation to old repairs which means that recently performed repairs (acc. SRM or approved by Airbus RDAS) would have to be inspected also.

We propose to include SB A320-55-1041 para 3.C.(1)(C) as shown below in the AD:

“Repairs not affected by this Service Bulletin are those which: – have been covered by AIRBUS RDAS after February 2010... - have been done with SRM revision February 2010 or later”

Otherwise there will be a disagreement between AD and SB text and intention.

2nd comment: PAD 13-133 compliance time do not provide any benefit if inspections of the rudder acc. MRB/MPD tasks 554003-01-1, 5540-08-01-1, 554009-01-1 have to be performed within the compliance time frame of the AD/SB.

SB 55-1041 will require min. 2 days ground time. In case of a non-compliance with the paint thickness requirements the required ground time will have to be extended by minimum 2 days to allow paint removal and repainting. The inspections acc. above mentioned MRB/MPD tasks are much less time consuming and will detect a failed repair also ensuring the structural integrity of the rudder.

We propose to amend the AD as following:

“ within 24 month after the effective date of this AD or the last accomplishment of MRB/MPD tasks 554003-01-1, 5540-08-01-1, 554009-01-1, accomplish a thermography inspection”

This would allow better planning opportunities and limit the burden of this inspection requirement.

EASA response:

Comments partially agreed.

1st comment: A repair performed in accordance to RDAS issued after Feb 2010 does not signifying that no previous repairs have been performed in accordance with wrong procedures. According to these criteria, it is not possible to exclude any rudders. Paragraph (5) of the Final AD has been slightly amended for clarity.

2nd comment: Current MBR / MPD tasks do not allow the detection of failed repairs. There is no reliable NDT method which can be used on the repair itself, only its surrounding can be inspected. Therefore repair size and location have to be previously determined (using pulse thermography) in order to allow inspection of their surroundings (with ELCh / UT). No changes have been made to the Final AD in response to this comment.