

EASA	COMMENT RESPONSE DOCUMENT
	EASA PAD No. 10-028 [Published on 15 March 2010 and officially closed for comments on 12 April 2010]

Commenter 1 : Air France Industries – Charles-David FITOUSSI – 12/04/2010

Comment # 1

In PAD 10-028 paragraph (4) and (5) it is mentioned that :

(4) Aeroplanes that have already been tested, before the effective date of this AD, in accordance with SB A330-28-3108 at original issue or SB A340-28-4123 at original issue, as applicable, and on which the operational test for correct functioning of NRV was successful, are already compliant with the requirements of paragraph (1) of this AD, but the repetitive operational tests required by paragraph (2) of this AD must be performed in accordance with the instructions defined in SB A330-28-3108 Revision 01 or SB A340-28-4123 Revision 01, as applicable.

(5) Aeroplanes that have already been tested, before the effective date of this AD, in accordance with the instructions defined in SB A330-28-3108 at original issue or SB A340-28-4123 at original issue, as applicable, and on which at least one NRV has been replaced:
No later than 15 January 2011, perform an additional operational test of the affected collector cell to confirm that corrective maintenance action has been successful for the affected collector cell, in accordance with the instructions defined in SB A330-28-3108 Revision 01 or SB A340-28-4123 Revision 01, as applicable.

AFR Analysis:

DELTA between AD 2008-0209 and PAD 10-028 (A330 / A340 fleet independently):

AD 2008-0209 - Revision 00 of SB A330-28-3108 or SB A340-28-4123

- NRV's Failure of Collector Cell N°X - Test for Leakage and Correct Filling in the Collector Cells:
- If test passed on the 2 NRV's:
- No action must be performed on the affected CC.

- If test passed only on one of the 2 NRV's:
- Replace the NRV failed on the affected CC.

- Perform a once again test for Leakage and Correct Filling in the affected Collector Cell after the NRV replacement. [EASA Response: See *](#)
- If test failed on the 2 NRV's:
- Replace the 2 NRV's failed on the affected CC.
- Perform a once again test for Leakage and Correct Filling in the affected Collector Cells after one or two NRV replacement.

[EASA Response: See *](#)

PAD 10-028 - Revision 01 of SB A330-28-3108 or SB A340-28-4123

- NRV's Failure of Collector Cell N°X - Test for Leakage and Correct Filling in the Collector Cells:
- If test passed on the 2 NRV's:
- No action must be performed on the affected CC.
- If test passed only on one of the 2 NRV's:
- Replace the NRV failed on the affected CC.
- Perform a once again test for Leakage and Correct Filling in the affected Collector Cell after the NRV replacement.
- If test failed on the 2 NRV's:
- Perform the engine feed line integrity
- If test passed :
- Do a General Visual Inspection of CC area for damage and rectify if necessary.
- Replace the 2 NRV's on the affected CC.
- Perform a once again test for Leakage and Correct Filling in the affected Collector Cells after the two NRV's replacement.
- If test failed:
- Do an inspection of the respective engine feed fuel pipework from the fuel pump canisters to the cross-feed valve and to the LP valve and rectify if necessary.
- Do a General Visual Inspection of CC area for damage and rectify if necessary.
- Replace the 2 NRV's on the affected CC.
- Perform a once again test for Leakage and Correct Filling in the affected Collector Cells after the two NRV's replacement.

You can noticed that test definition of SB rev 00 and SB rev 01 are different only in case of failure confirmed on the both NRV's per CC affected. (Otherwise tests and corrections are similar in the other cases).

Remarks:

In this way, AFR would like to highlight to EASA that requirements of PAD 10-028 paragraph (4) and (5) must be specified differently depending of the NRV number failure identified (and corrected) per affected Collector Cell:

Case N°1 (No NRV failure confirmed per affected CC):

Aeroplanes that have already been tested, before the effective date of this AD, in accordance with SB A330-28-3108 at original issue or SB A340-28-4123 at original issue, as applicable, and on **which the operational test for correct functioning of NRV was successful**, are already compliant with the requirements of paragraph (1) of this AD, but the repetitive operational tests required by paragraph (2) of this AD must be performed in accordance with the instructions defined in SB A330-28-3108 Revision 01 or SB A340-28-4123 Revision 01, as

applicable.

Case N°2 (Only one NRV failure confirmed per affected CC):

Aeroplanes that have already been tested, before the effective date of this AD, in accordance with the instructions defined in SB A330-28-3108 at original issue or SB A340-28-4123 at original issue, as applicable, and on **which one NRV per affected CC has been replaced and on which the operational test for correct functioning of NRV was successful**, are already compliant with the requirements of paragraph (1) of this AD, but the repetitive operational tests required by paragraph (2) of this AD must be performed in accordance with the instructions defined in SB A330-28-3108 Revision 01 or SB A340-28-4123 Revision 01, as applicable.

EASA Response: See **

Case N°3 (both NRV's failure confirmed per affected CC):

Aeroplanes that have already been tested, before the effective date of this AD, in accordance with the instructions defined in SB A330-28-3108 at original issue or SB A340-28-4123 at original issue, as applicable, and on which **both NRV's have been replaced**:

No later than 15 January 2011, perform an additional operational test of the affected collector cell to confirm that corrective maintenance action has been successful for the affected collector cell, in accordance with the instructions defined in SB A330-28-3108 Revision 01 or SB A340-28-4123 Revision 01, as applicable.

Note: the repetitive operational tests required by paragraph (2) of this AD must be performed in accordance with the instructions defined in SB A330-28-3108 Revision 01 or SB A340-28-4123 Revision 01, as applicable.

Conclusion:

- Case N°1 and case N°2: No action is required (Aeroplanes are already compliant with the requirements of paragraph (1) of this AD)
- Case N°3: Action is required (additional operational test must be performed iaw the requirements of paragraph (1) of this AD)

AFR Question:

Is EASA agree with AFR remarks/comments on "required application and compliance time" paragraph regarding SB A330-28-3108 Revision 01 or SB A340-28-4123 Revision 01 treatment for new additional operational tests ?

EASA response:

The reasons for revising the SB to Rev. 1 are the following:

- 1) The accomplishment instructions and flow chart have been improved.
- 2) The test of the collector cell depletion after the NRV replacement was, for SB Rev 0, included in the flow chart, but omitted in the accomplishment instructions. This has been corrected in the Revision 1 of the SB.
- 3) In order to avoid supplemental cost due to unnecessary repetitive tank entries, an engine feed integrity check has been added to the accomplishment instructions (not considered as additional work).

Regarding point 2, Rev 0 of the SB indicated on the Flow chart to repeat the Collector cell test after replacement of the NRV(s) and tank closure.

Unfortunately this re-test has been not included by Airbus in the accomplishment instructions of the SB Rev. 0.

This was considered as being additional work.

Therefore EASA don't agree with the request to consider Cases N°1 & N°2 as "no action required", as the re-test after NRV replacement could have been omitted.

In addition to this clarification, please also refer to the notes here below providing additional explanations to AFR comments.

- * For Rev 0, this task was only mentioned in the flow chart and was omitted in the SB accomplishment instructions. The AD did not mention the relevant task either.
- ** Regarding the "on which the operational test for correct functioning of NRV" statement, for Rev 0, this task was only mentioned in the flow chart and was omitted in the SB accomplishment instructions. The AD did not mention the task either. Therefore, the operational test after NRV replacement could have been omitted (also not mentioned on AD 2008-0209).