

## COMMENT RESPONSE DOCUMENT

EASA PAD No. 20-009

[Published on 17 January 2020 and officially closed for comments on 14 February 2020]

### Commenter 1: GKN Aerospace – Bob Groenendijk – 20/01/2020

#### Comment # 1

This PAD 20-009 mentions A318/A319/A320/A320.

Solenoid Valve DVE90-06/-07 are also part of ATR72 design.

Should things be expanded to ATR72 fleet?

**EASA response: Comment noted. Available data is being reviewed to identify which actions are required for ATR aeroplanes. Should it result in an AD to be issued, it will be posted for consultation in the EASA Safety Publication Tool. No changes have been made to the Final AD in response to this comment.**

### Commenter 2: Windrose Airlines – Dmitriy Pognaiev – 20/01/2020

#### Comment # 2

WINDROSE AVIATION (WRC) is in the process of implementing Airbus SB A320-35-1095 R0 on our fleet.

Our all A320/A321 aircraft equipped with 4 (four) crew oxygen mask. Refer to SB 35-1096 R0 it is enough to perform three masks flow test – CAPR, F/O and third occupant.

PAD 20-009 require to perform each cockpit crew mask flow test. That means for all four masks. Please advise i.a.w. document we should do the test for the fourth occupant mask.

**EASA response: Comment agreed. No test is required for 4<sup>th</sup> cockpit crew mask. Final AD has been updated accordingly.**



**Commenter 3: Lufthansa Technik – Christian Veckenstedt – 22/01/2020**

**Comment # 3**

A) The same questions that I asked for A330/A340 are valid for the attached A320 PAD except the new requirement “before next flight after installation, it passes a flow test (no defects found) in accordance with the instructions of the SB.”:

“PAD No. 19-102 defines the following:

**Affected part:** Solenoid valves (SV), having Part Number (P/N) DVE90-06 or P/N DVE90-07.

**Serviceable part:** An affected part which has passed a flow test (no defects found) in accordance with the instructions of the applicable SB.

**Parts Installation:**

(3) From the effective date of this AD, installation on an aeroplane of an affected part is allowed, provided that the part is a serviceable part, as defined in this AD.

*That would mean that all our spares are unserviceable and we have no possibility to replace a SV in case of an unscheduled removal. As there is no test on component level available/required, how can a spare SV be classified as serviceable?*

*The only possibility would be to add the SDI to the AMM installation procedure for the SV or to publish a check on component level for all spares. Even a new SV from the manufacturer must be checked after installation on the A/C according to the scheduled SBs.*

*Generally spoken, the malfunction of this component was detected in the LHT shop in November 2016. The problem is on component level, but there is no action on component level (e.g. Component SB) for the DVE90 valves. If the intention of this AD shall be only a snapshot of the finding rate of the flying SVs, the “Parts Installation” should be changed.”*

Concerning this new requirement: the accomplishment of an SB is a scheduled maintenance event and cannot be performed on attrition in a case of unscheduled valve removal. For this case, an adopted AMM installation task is required.

B) There is still no action and marking on component level or an adapted installation AMM task available.

**EASA response:**



**Comment noted.**

**3A) Definition of affected part and serviceable part in the final AD have been amended to refer to the year of manufacturing and to SV overhaul.**

**The definition of “serviceable part” provided in the AD is only applicable for this AD, and must not be used as a general definition.**

**Parts in stock, not previously tested in accordance with the SB instructions, can be anyway installed on an aeroplane affected by this AD, provided they pass the SDI test before next flight after installation.**

**A part which has been produced or overhauled as per the applicable CMM and released with a valid certificate after 2016 is deemed serviceable. The additional test on-wing is not required by the AD nor the SB, but it is not forbidden either.**

**Regarding the parts produced or overhauled before that date the on-wing SDI test is required. To be noted that for a part which already passed the test, no further test is required after a new installation of that part.**

**3B) This is not required by the AD nor the SB, however it is not forbidden to identify the part which has been inspected or passed the SDI test. No changes have been made to the Final AD in response to this comment**

**Commenter 4: Vietjet Air – Tran Viet Giao – 23/01/2020**
**Comment # 4**

For new solenoid valve delivered with new airplane. Can we consider manufacture date of valve same as airplane manufacture date.

**EASA response: Comment not agreed. Airbus SB provides instructions how to identify the manufacture / overhaul date of the valve, please refer to it. No changes have been made to the Final AD in response to this comment.**

**Commenter 5: Cathay Pacific Airways – Kevin Hsieh – 31/01/2020**
**Comment # 5**

Cathay Pacific has three queries regarding EASA PAD 20-009 issued on the 17-Jan-2020:

A. Corrective action (3) states that an affected part can be installed provided that it is either “serviceable” as per the PAD definition or “it passes a flow test (no defects found) in accordance with the instructions of the SB.” However, as per the PAD definitions, a “serviceable part” is defined as “An



affected part which has passed a flow test (no defects found) in accordance with the instructions of the SB.”, which seems like the same thing. Can EASA clarify the OR condition provided in this paragraph and what is difference between the two options?

B. Referring to corrective action (3): Since the SB flow test is required to be performed on-wing, it is currently not possible to inspect an affected part without installing it first. To avoid a potential situation of a newly installed part failing the test and thereby requiring subsequent removal, can EASA also include an alternative off-wing test for spare parts (e.g. manufacturer VSB or additional CMM test)? Cathay’s perspective is that any component that is inspected/tested per the CMM by an authorized repair facility and released with a valid certificate should be deemed as serviceable. There should not be any need to perform additional on-wing testing after that.

C. If point 2. above is not possible, can EASA clarify if there is a plan to introduce a permanent fix to mitigate the need to perform the flow test after each installation?

**EASA response:**

**5A – Comment noted. The test required by the AD can only be accomplished on a solenoid valve already installed. A solenoid valve manufactured before 2016, kept as spare and not previously tested/overhauled (i.e., not serviceable per the definition provided in the AD) would be therefore not eligible for installation (unless a complete overhaul is accomplished). No changes have been made to the Final AD in response to this comment.**

**5B – Comment partially agreed, refer to EASA answer to comment 3A**

**5C – Comment noted - Paragraph (3) of the AD does not require accomplishment of the test after each installation. A part which already passed the test in the past is serviceable (as defined in the AD) and can be installed on board in accordance with the standard applicable AMM procedure (i.e., no need to accomplish again the SDI test required by the AD). See also EASA answer to comment 3A**

**Commenter 6: Nordic Regional Airlines Oy – Karoliina Parhiala – 03/02/2020**

**Comment # 6**

We were reading the PAD and noticed that these same oxygen solenoid valves, DVE90-06 and DVE90-07, are also installed on our ATR fleet. Should the AD be applicable also on ATRs or is the increased flow resistance only problem on Airbuses?

**EASA response: See EASA answer to comment 1**



**Commenter 7: United Airlines – Roberto Alcantara – 03/02/2020****Comment # 7**

After review of the subject PAD, United Airlines has the following comments:

A. On the Service Bulletin, accomplishment instructions, Check the results of the test, 3.C. (2).(c). 1. and if the result is a failure, to check the oxygen storage cylinder is fully open 3.C. (2).(c). 1. b.<1>. and then do the test again.

United would like to suggest the checking of the oxygen storage cylinder is fully open, be part of the preparation. This would preclude the repetition of the test again.

B. United would like to suggest that the affected part that have been inspected and passed the flow test be marked. This would easily identify the part has been inspected and passed the test and eliminate any doubt that the inspection was performed on the unit. Also, this would prevent the part from being tied to an airplane. In the future, in case another airplane would need this part, the marking would indicate that the part has been inspected and tested.

**EASA response:**

**7A – Comment noted, and shared with Airbus for possible SB update. No changes have been made to the Final AD in response to this comment.**

**7B – Comment noted. This is not required by the AD or SB. Anyway, it is not forbidden. See also EASA answer to comment 3B.**

**Commenter 8: N/A – Florian Kürten – 05/02/2020****Comment # 8**

I would like to take the opportunity to comment the EASA PAD 20-009.

Acc. EASA PAD 20-009 the Airbus SB A320-35-1096 will be used to perform a flow test on the aircraft to ensure that the solenoid valve is serviceable.

Reference:

" The SB: Airbus Service Bulletin (SB) A320-35-1096."

"Serviceable part: An affected part which has passed a flow test (no defects found) in accordance with the instructions of the SB."



"Parts Installation: (3) From the effective date of this AD, installation of an affected part on an aeroplane is allowed, provided that the part is a serviceable part, as defined in this AD, or provided that, before next flight after installation, it passes a flow test (no defects found) in accordance with the instructions of the SB."

The AD refers to the aircraft SB as accomplishment instruction. Parallel to the Airbus SB probably a VSB/SBC for the shop will exist, which describe what to do with an valve that has not passed the flow test.

What would now happen in the case, that a valve from a repair shop or the vendor is received with a Form 1 that declares the valve as serviceable, but will not be referenced as compliant with Airbus SB A320-35-1096 on the remarks field of the Form 1 due to the fact that the shop/vendor is not be able to perform the Airbus SB (because the Airbus SB is only an Aircraft SB that is not applicable to the component). The Shop or Vendor will only be able to certify the valve as compliant with a VSB/SBC that is not mentioned in the EASA PAD.

So at the moment every operator would have to perform the Airbus SB with every installation/replacement of the oxygen solenoid valve to be compliant with the EASA AD (although the part is serviceable). Therefore, I would like to ask the agency if the implementation of the shop VSB/SBC would be a sufficient method to be compliant with the EASA AD without performing the Airbus SB again? In that case a reference to the VSB/SBC should be added to the EASA AD text.

***EASA response: Comment not agreed. No changes have been made to the Final AD in response to this comment.***

***See also EASA answer to comment 5B***

#### ***Commenter 9: Emirates – Waliuddin Imamuddin – 06/02/2020***

##### ***Comment # 9***

While the SB calls for a re-test to be performed again if a replacement is required while accomplishment of the SB however UAE is unclear of the action required if the Solenoid valve P/N DVE90-07 was replaced during service (Not during embodiment of SB A320-35-1096) . Is there a requirement to perform the test?

The item (3) of PAD No. 20-009 dated 17 January 2020 notes we need to flow test after each installation in accordance with the instructions of the SB A320-35-1096.

But Relevant AMM task does not reflect flow test after installation/replacement of solenoid valve.

How flow test will perform after replacement during service?



**EASA response: Comment not agreed. Refer to EASA answer to comment 5C.**

**Installation of a solenoid valve not previously tested is allowed provided it passed the test as required by the AD (i.e., in accordance with the instructions of the SB) before next flight after installation. Refer to EASA answer to comment 3**

**Commenter 10: Alaska Airlines – Eric Dittbrenner – 21/02/2020**

**Comment # 10**

10A) In reading the “Parts Installation” paragraph, it says that any part installed must be a “serviceable part”, as defined in the AD, OR, that the part must pass the flow test before the next flight after installation. The AD defines a “serviceable” part as one that has accomplished the on-wing flow test, per the SB. My question is, is it possible for a part to be “serviceable” without accomplishing the on-wing flow test? Does the TEST OF THE OXYGEN SOLENOID VALVE per CMM 35-12-71 (Dec 05/18, or later), performed after an overhaul, constitute a “serviceable” part per the AD? Please see enclosed extracted portion of the CMM.

10B) My other question is, is the intention of the AD to perform this test only once on affected parts? If so, since there is no part number modification, it appears the only way to track termination of the AD would be via an Airline’s internal documentation.

**EASA response:**

**10A) See EASA answer to comment 3A**

**10B) See EASA answer to comment 3B**

