

EASA	COMMENT RESPONSE DOCUMENT
	EASA PAD No. 15-028 [Published on 27 March 2015 and officially closed for comments on 24 April 2015]

Commenter 1: China Southern Airline – Ma Guo Dong – 31/03/2015

Comment # 1

PAD 15-028 was reviewed. By my feeling, the description of Section "Required Action(s) and Compliance Time(s):" is too complex to understand. I suggest to revise the description for Required Action(s) and Compliance Time) in a way similar as in SB A320 A320-27-1242.

EASA response:

Comment understood but not agreed. To clarify, the AD requires the following:

§(1) – remove from service each THSA that has, on a selected date in Table 1, reached or exceeded the corresponding limit. This means that (e.g.) the FC accumulated by a THSA on the effective date of this AD are not relevant – those accumulated on a specified date (Table 1) are.

The purpose, as explained in the Reason, is to get these THSA in shop (overhaul) for NBB brake disc replacement, after which they are again eligible for installation on an aircraft. Since in-shop actions are done off-aircraft (aircraft is already safe with replacement THSA Installed), the AD does not require the in-shop actions.

§(2) complements §(1) and requires, from each date (in Table 1) forward, the removal from service of each THSA which was NOT yet removed per §(1) – below the FC limit on the selected date – when (or before) the THSA reaches the limit at any time after the date – FC limit = do-not-exceed.

§(3) indicates, together with Note 2, the conditions for installation of a replacement THSA.

Repetitive actions are foreseen as maintenance task (THSA overhaul) in a future revision of the Airbus ALS document.

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

Commenter 2: All Nippon Airways Co.,Ltd. – Keisuke Yoshitake – 07/04/2015

Comment # 2

ANA would like to clarify and request Airbus and EASA to correct the contents. In the Note 2 of "Required Action and Compliance Time", a serviceable THSA is defined as follows.

Note 2: For the purpose of this AD, a serviceable THSA is a THSA having a P/N 47145-XXX which has not exceeded the flight cycle (FC) limits specified in Table 1 of

this AD, since first installation of the THSA on an aeroplane, or since last application of UTC Aerospace Systems (UTAS) Service Bulletin (SB) 47145-27-17 dated 16 Feb 2015, whichever is later.

The UTC Aerospace Systems (UTAS) Service Bulletin (SB) 47145-27-17 dated 16 Feb 2015 has just been released together with Airbus SB A320-27-1242 dated 09 Feb 2015.

As shown in the UTC Aerospace Systems (UTAS) Service Bulletin (SB) 47145-27-17 dated 16 Feb 2015, some NBB disks were replaced during embodiment of SB 47145-27-08 or other shop work.

Therefore, the THSA whose NBB disks were replaced prior to the release of UTC Aerospace Systems (UTAS) Service Bulletin (SB) 47145-27-17 dated 16 Feb 2015 and have not exceeded the FC limits specified in Table 1 shall be also serviceable.

So, ANA believes the above Note 2 must be corrected as follows.

Note 2: For the purpose of this AD, a serviceable THSA is a THSA having a P/N 47145-XXX, which has not exceeded the flight cycle (FC) limits specified in Table 1 of this AD, since first installation of the THSA on an aeroplane, or since last NBB disk replacement during application of UTC Aerospace Systems (UTAS) Service Bulletin (SB) 47145-27-17 dated 16 Feb 2015 or past shop maintenance work, whichever is later.

DESIRED ACTION:

1/ Please advise if EASA confirms the existing Note 2 is incorrect and must be corrected as stated above.

2/ If 1/ is positive, please correct the Note 2 at the time of AD release.

3/ If 1/ is negative, please advise the reason.

EASA response:

Comment agreed. If it can be demonstrated that, during recent THSA maintenance, the NBB brake discs were replaced, that moment can be used for FC accumulation and the limits specified in the AD.

Note 2 of the Final AD has been amended accordingly.

Commenter 3: United Airlines – Chunying Shen – 16/04/2015

Comment # 3

United Airlines has reviewed the proposed AD regarding the Airbus A320/A319 Trimmable Horizontal Stabilizer Actuator (THSA) – Identification / Replacement. United requests clarification of the correct interpretation of Table 1 (THSA Removal for NBB Disks Replacement).

Using a THSA that will accumulate 30,000 FC in 2017 as example, per Table 1, this THSA won't need to be replaced until December 31, 2019 (assuming the unit will accumulate less than 31,600 FC by December 31, 2018). Please verify if United Airlines' interpretation of this PAD is accurate.

EASA response:

Comment agreed. The commenter's assumption is correct. A THSA that is on 31 December 2018 still below 31,600 FC (lowest-but-one limit in the AD) does not need to be replaced until it reaches 30,000 FC (lowest limit), even if that moment occurs after 31 December 2019. If the 30,000 FC is reached during 2019, the THSA can remain installed until 31 December 2019.

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

Commenter 4: Jetstar – Jordan Becroft – 20/04/2015

Comment # 4

JST have noted the many comments made by ANZ, DAL and AXM regarding original Airbus PAD and concur with most of their concerns. JST are mostly concerned with the amount of service literature against this component, notably the Airworthiness Directives (AD-2014-0011, AD-2012-0175R1, this PAD +superseded AD's) and the 17 VSB's applicable to this series.

JST believe that the ongoing and ever increasing maintenance requirements are getting to a point where a sound overhaul program should be investigated. JST also find it very difficult to manage these ongoing requirements due to the different methods required for scheduling (such as the method used in AD-2012-0175R1 –not before 20 years but prior to 22 years). Although this threshold is referenced in AD-2012-0175R1, JST are still receiving components from repair facilities prior to 20 years having the intent of the AD embodied at shop visit which conflicts the strict AD guidelines. Having AD's applicable to an aircraft yet exclusively requiring maintenance to be performed in the shop on a component makes it difficult to show compliance and effectively plan.

It is understood that the thresholds utilised for the PAD have been set to assist Airlines to schedule the AD requirements but without an extremely sophisticated maintenance information system it is difficult to manage. The required actions / compliance times in the PAD, A320-27-1242 and SB 47145-27-17 don't seem to use the same wording either which makes it very conflicting, so without extensively reviewing all documents and comparing it could be possible to interpret the requirements differently.

JST request that these comments are taken into consideration for this and any other future service literature against this series THSA.

EASA response:

Comments understood but not agreed. This AD does not require component maintenance to be performed in shop. Such actions can only be required by an AD applicable (see section Applicability of each AD) to either engines, propellers or equipment, not by an AD applicable to aircraft. Replacement with a brand new THSA is a perfectly acceptable action to comply, although more costly for the operator. Removal and in-shop overhaul of a THSA, as also stated in the EASA answer to Comment # 1, is an off-aircraft action and therefore not required by AD.

In the EASA view, tracking THSA FC does not require extreme sophistication.

Although the wording used in this AD (EASA document) may be different from the SB (Airbus document), in this case the FC limits and corresponding dates are exactly the same. Please note that an AD must be written so as to leave no room for erroneous interpretation – the side-effect of this may be that sometimes an AD is very complex. In our view, this is not the case here – see also the clarification in EASA answer to Comment # 1, as well as the answer to Comment #3.

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

Commenter 5: Aer Lingus – Daniel Fanning – 27/04/2015 [late comment received after exchange with Airbus]

Comment # 5

I think the wording in the PAD is still very ambiguous. Think the wording in VSB 47145-27-17 and OIT 999.0032/15 is better i.e. “from X date operation with more than Y FC is not allowed”.

However, this contradicts [Airbus] statement “We would like to inform EIN that the compliance time has been defined based on accumulated FC of NBB at the date where the thresholds are expressed.” I am operating off the basis that the FC since NBB change and THSA FC are the same as is the case for all our units (I believe).

I can give an example to try to explain it. Per the PAD, operators are instructed to check the status on or before 31st Dec each year and confirm that no units are in excess of the values noted. So if on 31/12/15 I checked and had a unit on 39000FC I am in compliance with the PAD as the unit is not over 40000FC. However I know that my aircraft operate approx. 2500FC per year.

Per the PAD and your statement, I don't have to check again until 31/12/16, so I will have knowingly been operating a part in excess of 40000FC but I am not out of compliance with the PAD as I do not have to check until 31/12/16. This is contradicting the statements in the VSB/OIT. However if the VSB and OIT are correct, there is still no statement in the PAD to drive me to remove the unit when it reaches 40000FC (or the other respective limits as the years progress).

So in my opinion (if it is the intention of the limits), the PAD wording should align with the VSB/OIT.

I will also ask Airbus to note that this type of changing limit is extremely difficult to manage from an operator perspective. If we put a part requirement limit on the parts to ensure they do not exceed the intended limit, that limit must be changed and micro-managed to ensure there are no exceedances. Furthermore, it gets more complicated as if a unit goes to shop for the NBB change the initial requirement limit set is no longer effective to that part as it now comes under the repetitive interval column of the SB (following NBB change at shop) – which is not clearly defined either (per my initial message. For information Aer Lingus use the AMOS maintenance software, like many operators..

EASA response:

Comments understood but not agreed. FC accumulated by the THSA since new or since last NBB disc replacement (e.g. last overhaul) are clearly NOT the same. It is correct that a THSA that accumulates 39,000 FC on 31/12/2015 does not have to be removed (§ 1 of the AD) from the aircraft on that date. However, it must be replaced before exceeding 40,000 FC sometime during 2016 (taking the commenter's example of approx. 2,500 FC per year). This requirement is contained in paragraph (2) of the AD, which is the “statement in the PAD to [] remove the unit when it reaches 40000FC”. The words “from each date” indicate exactly that: each limit – progressively lower – is valid (= do not exceed) from each date. In our view, there is no contradiction.

As stated in the EASA answer to Comment #4, although the wording used in this AD (EASA document) may be different from the SB (Airbus document), in this case the FC limits and corresponding dates are exactly the same. It should be clear that the dates are NOT only to be used as ‘moments to check’ the FC accumulated by the THSA.

In EASA view, no micro-management is necessary, only tracking of THSA FC, either since new, or since last NBB disc replacement, as applicable. As also stated in the EASA answer to Comment #1, repetitive actions are foreseen as maintenance task (THSA overhaul) in a future revision of the Airbus ALS document. When that ALS revision is approved and published, EASA is expected to issue an AD for that ALS revision, at that time superseding this AD.

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