

Airworthiness Directive Reading Exercise

Note: More than one answer can be correct

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Your safety is our mission.

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Comments and Questions

Before sending any 'continued airworthiness' question to EASA, please review our <u>AD Homepage</u> and our AD FAQ.

For submitting your comments on a Proposed AD, click on "send comment" just below the subject/description. For specific or general continued airworthiness (AD, SIB, etc.) questions, contact the EASA Safety Information Section at ads@easa.Europa.eu.



Document for AD Compliance

Subject: An EASA AD requires the use of a specific issue of a referenced document (e.g. SB). The action is already scheduled (not yet done), but now a revision of the SB has been issued.

➤ Question: Am I required to use the 'current' revision of the SB to comply with the AD?

[how would you reply?]



EASA position on 'later approved' SB

EASA answer: When an SB (for which an AD exists) is revised, it is <u>allowed</u> to use that revised SB, <u>not required</u>. [However, it does make common sense at any time to use the latest revision voluntarily, as this may contain improved (or corrected) instructions]

For the record, EASA <u>PR.CAP.0001</u> (procedure for CA) specifies that, when a TC holder introduces changes into a revision of an EASA AD-related SB concerning

- Applicability (expanding or reducing affected fleet),
- Compliance Time, or
- Accomplishment instructions (the nature of required actions),

it is (nearly) certain that EASA AD action (revision, supersedure, etc.) will follow, sooner or later.



Subject: This AD applies to certain Zodiac cabin attendant seats and requires repetitive visual inspections and, depending on findings, replacement of the seat pan.

➤ These seats are known to be installed on, but not limited to, ATR 42 and ATR 72 aeroplanes.



Question 1: Am I required to install a reinforced seat pan on each affected seat?

- ➤ Yes, this is specified in the Zodiac SB.
- ➤ No, this is not required.
- > Yes, this is required by paragraph (5) of the AD.



Question 2: Am I required to inspect an affected seat held as spare, i.e. not installed?

- > Yes, within 30 days after 24 August 2016.
- ➤ No, this is not required.
- ➤ Yes, this is required as specified in paragraph (6) of the AD.



Subject [operator query]: I would like to seek clarification on the compliance timeframes [as specified in] EASA AD 2017-0003 and the associated Rolls-Royce NMSB 72-AH976.

- ➤ <u>AD says:</u> within 6 000 engine flight cycles [] after the effective date of this AD (i.e. 23 January 2017), accomplish an FPI of the CIC in accordance with the instructions of the NMSB.
- ➤ <u>NMSB says:</u> Carry out the actions detailed in 3.A. Accomplishment Instructions [] within 6,000 cycles of the initial issue of this NMSB (i.e. 3 November 2016).



Question 3: The datum for counting the cycles are different (23 January 2017 in AD vs. 3 November 2016 in NMSB); which one should be followed?

- ➤ The AD effective date, which takes precedence over the SB issue date.
- ➤ The operator can choose.
- ➤ The SB date, since action must be accomplished "in accordance with the instructions of" the NMSB.



Subject: This AD applies to Rolls-Royce Trent 1000 engines and requires repetitive inspections of certain IPC Rotor Seals.

Operator case: With reference to § (2), it is noted that the inspection procedures in NSMB 72-AJ467 (on-wing) and 72-J353 (in-shop) are the same, but the criteria are different. If any crack is found, the seal is rejected (must be replaced) by NMSB 72-J353, but is acceptable (some fly-on time allowed before replacement) by NMSB 72-AJ467.



Question 4: If any crack is found on the front face of the affected seal in shop, can the operator apply the accept/reject criteria as specified in RR NMSB 72-AJ467?

➤ Yes.

➤ No.

➤ Open to interpretation.



Subject: This AD applies to Airbus A330 and A340 aeroplanes and requires inspection and replacement of certain parts, manufactured of the wrong aluminium alloy.

Operator case: Per §(3) of the AD, we understand that we can replace the part any time after SDI inspection, but before the due date of AD. That would mean that, after SDI, even if suspected parts are found, the replacement can be deferred till the due date of the AD.



Question 5: Is the operator's understanding correct?

➤ No.

➤ Yes.

➤ AD unclear; open to interpretation.



Subject: This AD applies to Airbus A330 aeroplanes and requires replacement of a certain engine hydraulic damper with an improved (double welded) damper.

Operator's case: We have a spare engine (off-wing) with an 'affected part' single weld damper fitted, and the engine is not expected to be reinstalled before 10 August 2017. Our interpretation: The engine is still in compliance as long as we replace 'affected part' with 'serviceable part' at the next engine installation after 10th August 2017.



Question 6: Is the operator's interpretation correct?

- ➤ Yes.
- ➤ Not relevant. This is an aircraft AD, not an engine AD.
- ➤ The part must be replaced within 800 FC or 5 months after engine (re)installation.



Subject: This AD applies to all Piaggio P.180 aeroplanes and requires repetitive inspections of certain flight control parts (flaps, slats, ailerons and elevators).

Operator case: AD 2017-0045 states that it is applicable to all MSN, but in the "required action(s)" section, §(1), it requires action only on MSN 1002 and 1004 to 1220 inclusive.



Question 7: What is the correct information, the Applicability (all MSN), or the MSN listed in §(1)?

- ➤ All aeroplanes must be inspected.
- ➤ All aeroplanes with an "affected control surface" (see Note 1 of this AD) installed must be inspected.
- ➤ Only MSN 1002, and 1004 to 1220 (incl.) must be inspected.



Subject: This AD applies to Airbus A330 and A340 aeroplanes requires inspections of certain slat tracks.

Operator case: The Airbus SB indicates that the threshold for P/N inspection is 15,000 FC, or 50,000 FH, or 24 months, whichever occurs later. However, AD 2017-0060 Table 1 allows 24 months only for Group 1 aeroplanes. The AD does not give any time limit for Group 2 aeroplanes, nor for the P/N inspection separately. The only applicable threshold for P/N inspection is 15,000 FC or 50,000 FH, whichever occurs later.



Question 8: As this is considered a discrepancy between AD and SB, will the AD be revised or corrected?

- ➤ Yes, calendar time must be provided for P/N identification to avoid AOG.
- ➤ No, operators are expected to be aware of the configuration of their aeroplane(s).
- ➤ Only § (12) contains requirements for Group 2 aeroplanes.



Subject: This AD applies to Airbus A330 and A340 aeroplanes and requires repetitive inspections of centre wing box fastener holes and, for certain aeroplanes, modification.

Operator case: AD requires removal of the fasteners and an SDI of the fastener holes in accordance with the applicable Airbus SB. However, the SB initial instruction is to check for an existing repair (RDAS – repair design approval sheet), not accomplishing an SDI.



Question 9: Does the AD require to check for an RDAS?

- ➤ No.
- ➤ Yes, as it is part of the SB accomplishment instructions not explicit in the AD, as operators are expected to know whether any repair has been made.
- ➤ The AD does not specify.



Question 10: In case an RDAS does not exist, what is the compliance time for the first SDI?

- ➤ Before exceeding the applicable threshold as specified in the SB.
- ➤ Before next flight.
- ➤ The AD does not specify.



Subject: This AD applies to Rolls-Royce Trent 700 engines and requires inspection of certain repaired compressor intermediate cases.

Operator case: Engines installed on our A330-243 aircraft are brand new RB211 Trent 772B-60 and have never received any compressor intermediate cases (CIC), RR Repair FRSC005. However, new, or any other engines which have <u>not</u> received such repair, are not explicitly excluded from, or considered in compliance with, this AD.



Question 11: Can engines with CIC's not repaired by RR FRSC005 be considered "in compliance" with this AD?

- > Yes. No corrective action required.
- ➤ No, § (4) of the AD remains required.
- ➤ Cannot be determined from the AD.



Subject: This AD applies to Rolls-Royce Trent XWB engines and requires repetitive inspections of certain IPT Stage 2 locking plates.

Operator case: We believe that the intent of § (6) of the AD is to inspect the serviceable spare engines which have not yet been inspected i.a.w. NMSB 72-AJ738 in the past, to be inspected before engine installation.



Question 12: For an engine that was inspected, but then removed (e.g. for maintenance) from the aeroplane, is there a need to inspect before (re)installation?

- ➤ No, first inspection must be within 750 cycles since last inspection.
- ➤ That depends on whether any locking plate was installed during the 'removed' period.
- ➤ Each engine must pass an inspection before (re)installation.



Question 13: For an engine currently on-wing, but below inspection threshold, then removed/reinstalled, is the inspection only due when reaching the threshold?

- ➤ Correct.
- ➤ That depends on whether any locking plate was installed during the 'removed' period.
- ➤ Each engine must pass an inspection before (re)installation.



Subject: This AD applies to Airbus AS350 helicopters and requires repetitive inspections of certain starter generators.

Operator case: The AD applicability is not clear. We have an AS350B3 with an ARRIEL 2B installed, which indicates the AD applies. But in the Airbus Helicopters ASB, the applicability is only those AS350B3, equipped with ARRIEL 2B <u>and</u> Starter Generator P/N 150SG122Q-4. However, this P/N is not installed in our helicopter.



Question 14: Can we determine that this AD does not apply to our AS350B3?

➤ Yes.

➤ The AD applies, but no action is required until an 'affected' generator is installed.

➤ No.



Subject: This AD applies to Airbus A320 family aeroplanes and requires replacement of certain P/N forward engine mount main beams.

Operator case: In § (1) of this AD, it is required to replace the affected beam in accordance with the applicable SB. However, the SB is calling for inspection and, in case of findings, to rework the beam as per another SB.



Question 15: Is the AD correct to require direct replacement?

- ➤ No, the AD needs revision/correction.
- ➤ Yes, the AD requires removing the beam "in accordance with the instructions of" the applicable SB.



Subject: This AD applies to Airbus A380 aeroplanes and requires a software update of the engine bleed air system.

Authority inquiry: The AD shows that airplanes, in which Airbus modification (Mod) 77078 has already been installed, are not affected by the AD. However, we miss the information about these 'not affected' aircraft in the paragraph "Applicability" of this AD.



Question 16: Does the AD apply intentionally to post-mod 77078 aeroplanes?

➤ No, this is an oversight and the AD will likely be revised, reducing the Applicability.

➤ Yes, Applicability is correctly defined.



Subject: This AD applies to certain Airbus A320 family aeroplanes and requires repetitive inspections of certain engine mount assemblies; and modification, terminating the inspections.

Operator case: The AD (§12) indicates that, from 16 August 2017, an 'old P/N' aft mount cannot be installed. Upon inquiry, Airbus indicated that "if you are within the compliance time of the AD (48 months) and if the engine removed is PRE AD, you can install PRE AD parts if replacement is needed, or POST AD if you have parts on-stock." If such a case were to occur, the 'old P/N' mount would still be subject to the repetitive 12-month re-inspection as required by the AD 2017-0138. This information seems to contradict § (12) of the AD.



Scenario 1: An engine is installed with an 'old P/N' aft mount on 10 August 2017, and the mount would be subject to 12-month repetitive inspections. Compliance by 16 August 2021 to install new retainer assembly as required by the AD still applies. This is an acceptable condition.

Scenario 2: An engine is installed with an 'old P/N' aft mount on 20 August 2017. This would also be subject to 12-month repetitive inspections, until installation of new retainer assembly as required by the AD. According to §(12) of the AD, this is not allowed.

Scenario 3: An engine was installed (e.g. 2016) with an 'old P/N' aft mount, and is subject to 12-month repetitive inspections even after the AD effective date. The 48 months compliance period [installation of 'new P/N'] must still be met.



Question 17: With these different scenarios, can 'old P/N' mounts still be installed?

- ➤ Yes, provided the mounts are inspected as required by the AD.
- ➤ No, the AD clearly prohibits such actions.
- ➤ Yes, provided the aeroplane is not yet modified to have 'new P/N' mounts installed.



Subject: This AD applies to Airbus A320 family aeroplanes and requires replacement of certain oxygen pipes.

Operator case: Cannot find the compliance time for paragraph (2) requirement.



Question 18: What is the compliance time for § (2) of the AD?

- ➤ None; aeroplanes with MSN outside Group 1 and 2 are not affected by the AD.
- ➤ The same as for § (1) of the AD.
- ➤ Within 26 months after the effective date.



Subject: This AD applies to Leonardo (formerly AgustaWestland) AB139/AW139 helicopters and requires repetitive inspections of certain main rotor dampers.



Operator case: TC holder's SB instructs to inspect all installed MR dampers "Within 30 FH since receipt of this SB or at first removal whichever comes first for dampers that have logged 300 FH or more since new"; or "Within 30 FH since receipt of this SB, or when they reach 300 FH since new whichever occurs later on dampers that have not already logged 300 flight hours"; and "Before next installation for MR Dampers in stock that have logged 300 hours or more since new". By comparison, the AD requires inspection "Within the compliance times defined in Table 1 or Table 2 of this AD, as applicable", depending on MR damper P/N. These compliance times are contradictory and confusing.



Question 19: Are there differences between SB and AD, and if so, what are they (and why)?

- ➤ Not really; just some difference in wording.
- ➤ Yes, since the 'receipt of the SB' is replaced by 'effective date' of the AD.
- ➤ In case of any difference in compliance time(s) between SB and AD, those of the AD prevail.



Reading of AD 2017-0176-E

Subject: This AD applies to Leonardo (formerly AgustaWestland) A109 family helicopters and requires repetitive inspections and replacement of certain main rotor blades.

AD 2017-0176-E



Reading of AD 2017-0176-E

Operator case: TC holder's original Alert SB 109L-090 applies to helicopter with certain main rotor blades (MRB) installed, identified by P/N (one) and s/n (many). Then the ASB is revised (Revision A) with a totally different Effectivity, specifying two P/N (different than in original ASB) and only 3 s/n MRB.

By contrast, the AD requires actions in accordance with the instructions of "the applicable SB" which seems to include the original ASB. However, the tables in the AD only include (for the AO19LUH) the P/N and s/n as in Rev. A of the ASB.

These differences are contradictory and confusing.

AD 2017-0176-E



Reading of AD 2017-0176-E

Question 20: Is the EASA AD wrong?

- ➤ No.
- ➤ Yes, the original ASB instructions are wrong and therefore cannot be used.
- ➤ In case of any differences between SB and AD, e.g. in P/N or s/n details, or compliance time(s), those specified in the AD prevail.

AD 2017-0176-E



Subject: This AD applies to Airbus A340 aeroplanes and requires repetitive inspections (tap tests) of thrust reverser (T/R) outer fixed structure (OFS).



MRO case 1: Paragraphs (1) and (2) require tap tests of the OFS of the affected T/R in accordance with the instructions of SB A340-78-4050, which advices to upload an inspection report to Airbus after the inspection has been done "before next flight". For several reasons this requirement is far away from feasibility for a normal working airline or MRO. Upon inquiry, Airbus stated that "...the requirement to upload the inspection report "before next flight" is only recommended".



Question 21: [MRO case 1] Does the AD require reporting of tap test results to Airbus?

> Yes, the SB instructions are quite clear.

➤ No.

Open to interpretation.



MRO case 2: Paragraph (5) allows installation of an affected T/R, provided that "prior to installation, it has passed (no discrepancies found) a tap test", or "following installation, the T/R is tap tested and corrected as required by this AD". We understand that, for a T/R that has less than 11,000 FC accumulated at the time of installation, the inspection (first tap test) can be done later, i.e. within the time given in Table 2 of the AD. Hence, it is allowed to install that T/R without having passed a tap test before installation.



Question 22: [MRO case 2] Is the MRO understanding of paragraph (5) correct?

- ➤ Yes.
- ➤ No.
- ➤ Open to interpretation.



Subject: This AD applies to certain Airbus aeroplanes and requires modification or replacement of certain TCAS processors.

Operator case: Our Boeing 737-800 and 767-300 [are also] equipped with Honeywell TPA-100B TCAS processor, P/N 940-0351-001.



Question 23: Does AD 2017-0196 apply to any airplane equipped with TCAS processor, P/N 940-0351-001?

> Yes.

➤ No.

➤ Open to interpretation.



IMPORTANT: Commenting on (P)ADs

EASA always appreciate your comment(s), but we would prefer to receive them during the public consultation phase of the PAD which precedes the Final AD.

Feedback received during PAD consultation allows us to avoid errors and improve the readability of our ADs.

We publish answers to PAD comments and queries in a CRD, which may assist other operators in understanding our ADs.

Note that on our <u>website</u>, you can subscribe to e-mail notification of all new PADs (see <u>User Guide</u>).



Thank you for your participation!

ANY (FURTHER) QUESTIONS?

E-mail ads@easa.europa.eu

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