



European Union Aviation Safety Agency

Airworthiness Directive Reading Exercise

November, 25th – 26th 2019

Note: More than one answer can be correct

Your safety is our mission.

An Agency of the European Union 

EASA AD Reading Exercise

Part 1, presented by:
Paul van Eenige,
Senior Safety Information Officer

“but not limited to” ADs (1)

Operator case: There is an ongoing issue with the terminology “not limited to”, as it practically increases the difficulty of the operator to control an AD that contain this statement.

Often, it raises the question of whether the AD needs to be tracked or not.

This adds to our workload and contributes to an enormous AD status list, which may include even 300 component AD that are not applicable by [aircraft] type.

“but not limited to” ADs (2)

- Many of those ADs refer to certain TCH types and models, therefore why is the statement “not limited to” included?
- Can EASA be more specific on appliance/component ADs?
- We recommend that EASA and vendors put more effort in indicating the a/c types that have their components fitted to by design.
- Can EASA clarify the confusion over the statement’s application, i.e. some airlines will load such ADs, others will not.

Examples are: AD 2010-0067, 2018-0264R1, 2019-0235

“but not limited to” ADs (3)

Explanation/answers (1):

- The wording “but not limited to” is only used in ADs applicable to either: engines, propellers, or parts & appliances (equipment).
- The wording ensures that the AD has an effect on all aircraft that have these installed.
- This is done in cases where EASA, as well as the TC or ETSOA holder, cannot fully know (i.e. less than 100%) where the affected product or equipment is (or can be) installed.
- These are not only installed ‘by design’, but also ‘by design change’ (i.e. STC or minor mod), some of which are unknown to TC and ETSOA holder, and to EASA.

EASA AD CANNOT PROVIDE AN EXHAUSTIVE LIST OF AFFECTED AIRCRAFT

“but not limited to” ADs (4)

Explanation/answers (2):

- Operators are aware (known 100%) which engine, propeller or equipment is installed on their aircraft.
- How to record or ‘control’ those ADs where the affected engine, propeller or equipment is NOT installed on an aircraft is subject to agreement from the competent authority for that aircraft, who may agree that all demonstrated “not installed” ADs do not have to be tracked.
- For those cases, EASA would suggest that the operator at least records those ADs in a way that ensures an affected engine, propeller or equipment, as applicable, is not installed on an aircraft in future.

Reading of AD 2018-0094

Subject: This AD applies to Rolls-Royce Trent 1000 engines, requires repetitive inspections of certain seals, and imposes engine de-pairing requirements.

Operator case: RR SB 72-J603 or 72-J704 constitutes terminating action of § (1) of the AD. The in-shop inspection in accordance with NMSB 72-J353 (§2) is not mentioned in (§7) Terminating Action.

[AD 2018-0094](#)

Reading of AD 2018-0094

Question 1: If we carry out NMSB 72-J353 during the shop visit (for post J603 standard), can we still declare the AD as accomplished?

a. In-shop inspections remain required.

b. No.

c. Yes.

Explanation:

- Paragraph (2) of the AD is a 'credit' paragraph (without compliance time!).
- Doing NMSB 72-J353 in-shop is not required by the AD, it is only offered as an 'option' for engines that must comply with paragraph (1) of the AD – on-wing inspections.
- Engine is post-mod/SB 72-J603, so on-wing inspections are no longer required.

***AD PARAGRAPHS THAT DO NOT HAVE ANY COMPLIANCE TIME:
DO NOT CONTAIN REQUIREMENTS***



Reading of AD 2018-0228

Subject: This AD applies to certain Airbus A330 aeroplanes and requires inspection of specified engine air inlet cowl barrel lower panels to prevent in-flight detachment and possible damage to the aeroplane.

CAMO case: Per AD paragraph (1) , inlet cowls have to be inspected for disbonding every 24 months / 11000 FH / 2400 FC, whichever comes first.

[AD 2018-0228](#)

Reading of AD 2018-0228

Question 2: If an affected inlet cowl is installed on an aircraft per paragraph 5, 6 or 7, do we have to perform the inspection even if the 24 months / 11000 FH / 2400 FC since last inspection of this inlet cowl are not reached?

- a. Yes, the part must be inspected prior to installation.
- b. AD unclear; open to interpretation.
- c. No.

Reading of AD 2018-0228

Explanation:

- The starting point to determine the time of next 'due' inspection is determined by the previous inspection. FC and FH are obvious; for calendar time, the time between last inspection and removal of a part into storage must be taken into account. The time held as spare can be disregarded, **provided that** the part was properly stored and sufficiently protected against disbonding and/or moisture ingress.
- If a part was never inspected, it must be inspected before 05 Nov 2020 [=24 months after AD effective date], or before installation, whichever occurs later.

Reading of AD 2018-0249R1

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

Operator case: On our A330 (which is post-mod 44360 & 55306 & 55792), modification SB A330-57-3129 was embodied in Feb 2018 and repetitive inspection as per Airbus SB A330-57-3116 was never performed. During modification, a crack was found on LH side and a repair was performed using Airbus instructions.

[AD 2018-0249R1](#)

Reading of AD 2018-0249R1

Question 3: Can we consider AD terminated and repetitive inspection only monitored by Airbus post-repair instructions?

a. Yes.

b. No.

c. Unclear; open to interpretation.

Reading of AD 2018-0249R1

Explanation:

- Application of an Airbus Repair does not constitute terminating action for repetitive inspections required by an AD, **unless the AD specifies that explicitly.**
- The AD contains reference to an existing terminating action which is specified in paragraph (13).

TERMINATING ACTION IS ONLY VALID AS IDENTIFIED IN THE AD (OR BY AMOC APPROVAL)



Reading of AD 2018-0264

Subject: This AD applies to certain P/N “Centaurus” passengers seats installed on Boeing 777 aeroplanes and requires a one-time inspection and corrective action(s), depending on findings.

Operator case 1: The AD mentions Life vest pouch having P/N 313907100004.

Operator case 2: Appendix 1 provides a list of parts.

[AD 2018-0264](#)

Reading of AD 2018-0264 (case 1)

Question 4 (case 1): Must the pouch be replaced by another P/N?

- a. No.
- b. Yes.
- c. At operator's discretion.

Reading of AD 2018-0264 (case 1)

Explanation:

- If an AD does not specify a new P/N replacing the 'affected' P/N, it has to be assumed that the same P/N must be installed. It may be expected that the relevant approval holder's SB provides the details.
- In this case, if damage is found on a pouch (the SB identifies which kind of damage can be found, leading to replacement), it must be replaced with a pouch having the same P/N.

IF NO DIFFERENT 'SERVICEABLE' P/N IS IDENTIFIED IN AN AD, BY DEFAULT THE SAME P/N SHOULD BE INSTALLED



Reading of AD 2018-0264 (case 2)

Question 5 (case 2): Does the AD require replacement of (e.g.) part 13EA5Z5204JV by part 13EG7Z5204RV?

a. AD is unclear – open to interpretation.

b. Yes.

c. No.

Reading of AD 2018-0264 (case 2)

Explanation:

- Appendix 1, page 4 of the original AD, contains a list of parts. For Seats '13E', two columns of P/N are provided next to each other, e.g. 13EA5Z5204JV and 13EG7Z5204RV.
- This may appear as one replacing the other, but this is not the intent. Revision 1 of the AD (which was issued for reasons unrelated to this question) has remedied this possibility of misperception.

READ P/N LISTS CAREFULLY TO AVOID ERRORS

Reading of AD 2018-0289

Subject: This AD applies to Airbus A320 family aeroplanes and requires repetitive inspections of certain door stop fitting holes. The same actions were previously required by the ALS (ALI task), initially for holes at FR20 only; later revised to include those at FR16.

Operator case: We have an aeroplane on which ALI task 531103 was accomplished at 30,000 FC, before ALI revision (i.e., on FR20 only); the modification SB has not been accomplished; aircraft has accumulated [on the AD effective date] 2,000 FC since 31 May 2017 and 35,000 FC since first flight.

[AD 2018-0289](#)

Reading of AD 2018-0289

Question 6: When is the first inspection due, as required by the AD?

- a. Before exceeding 46 800 FC since first flight.
- b. Within 500 FC after AD effective date.
- c. Both answers a. and b. are correct.
- d. None of the above.

Reading of AD 2018-0289

Explanation:

- The AD requires inspecting each affected area, but does not require inspection of all affected areas concurrently.
- Affected areas are defined as “Door stop fitting holes at position 1 or 7 at frame (FR)16 or FR20, on left hand or right hand sides”. Based on this definition, there are multiple affected areas.
- For each affected area, a different threshold for the initial inspection may be valid, depending on whether that specific affected area has been previously inspected per ALI task, or not.

AD ACTIONS MAY NOT BE REQUIRED SIMULTANEOUSLY, EXCEPT IF STATED IN THE AD

Reading of AD 2019-0010

Subject: This AD applies to certain SAFRAN life jackets and requires removal from service, pending in-shop repair prior to return to service.

Operator case: The AD states that, if a different P/N life vest is installed, **using the instructions of the TC holder of the aircraft** on which the life jacket is installed is an acceptable method to comply with the requirements of paragraph (1) of this AD for that aircraft.

[AD 2019-0010](#)

Reading of AD 2019-0010

Question 7: Is it also acceptable to comply with the AD if any different life vest P/N is installed, e.g. in accordance with STC holder instructions?

a. No.

b. Yes.

c. Unclear.

Reading of AD 2019-0010

Explanation:

- Installing a life vest having a different P/N per instructions provided by an STC holder is also acceptable.
- The AD does not require using the aircraft TC holder's instructions, but only allows using those.
- Installation of a different P/N (= aircraft modification) does require the use of approved aircraft modification instructions.

FOR EQUIPMENT ADs: REPLACING AFFECTED EQUIPMENT WITH ANOTHER P/N CAN ONLY BE DONE USING AIRCRAFT MODIFICATION (TC, STC HOLDER) INSTRUCTIONS



Reading of AD 2019-0018

Subject: This AD applies to CFM56-7B engines, requires repetitive inspections of certain fan blades and corrective action(s) depending on findings.

Operator case: The SB allows deferral of the next inspection to 17,000 FC if the initial inspection was done before 15,400 FC.

If the initial inspection [paragraph (1) of the AD] was done at (e.g.) 14,500 FC, this would mean an interval of 2,500 FC until the next inspection. However, the AD does not allow that and would require the next inspection at 16,100 FC (1,600 FC interval).

[AD 2019-0018](#)

Reading of AD 2019-0018

Question 8: Is the operator's conclusion correct, i.e. is the AD more restrictive than the SB?

a. Yes.

b. No.

c. Unclear.

Reading of AD 2019-0018

Explanation:

- This AD does not require any action before its effective date (no compliances time(s) retained from previous AD). This means that, on the effective date of the new AD, it is allowed (but not required) to take credit for an inspection already accomplished, under the clause “unless accomplished previously”. In that case, subsequent inspections must be accomplished at intervals not exceeding 1,600 FC.
- However, if the operator does NOT change his records for the previous inspection as first compliance with the new AD, the first inspection is due as required by paragraph (1) of the new AD.

CREDIT FOR PREVIOUS ACTIONS CAN BE TAKEN; IT IS NOT ALWAYS REQUIRED TO DO SO



Reading of AD 2019-0084

Subject: This AD applies to Dassault Falcon 50, 900 and 2000 series aeroplanes and requires replacement of certain fire extinguisher cartridges.

Operator case: In our AMP, the time limit of 10 years for P/N 862700-00/862710-00 is already incorporated and tracked.

There is Note 6 in the MPD which states that: “For cartridges P/N 862700-00 and 862710-00: the cartridge has a maximum installed service life of 10 years and combined service/storage life of 12 years”.

[AD 2019-0084](#)

Reading of AD 2019-0084

Question 9: Should we revise AMP before 1 May 2019 to update only note 6 [of the MPD]?

a. Yes.

b. No.

c. Open to interpretation.

Reading of AD 2019-0084

Explanation:

- The AD requires removal from service of an affected part before it exceeds 10 years, except for the 'grace' period of 6 months as specified in paragraph (2).
- AMP revision (optional administrative task – no compliance time!) by incorporating the 10 years life limit is an acceptable method to comply with the requirements of paragraph (1) of this AD.
- Revising the AMP can be done at operator's discretion. Once done, the operator complies with his AMP and any subsequent removal of an affected part does not require recording the AD number.

Reading of AD 2019-0085 / 2019-0111

Subject: These two ADs apply to multiple Airbus types and ATR aeroplanes, respectively, and require inspection and replacement of certain crew/passenger oxygen cylinders.

Operator case: The ADs state that inspection is only required for Group 1 airplanes (those airplanes with affected part installed). We did a check of our maintenance records and determined that we have no affected parts installed, which means our airplanes are Group 2 per AD requirements.

[AD 2019-0085](#) and [AD 2019-0111](#)

Reading of AD 2019-0085 / 2019-0111

Question 10: Is it acceptable to claim compliance to the AD by use of our maintenance records to determine if an affected part is installed or not?

a. No.

b. Yes.

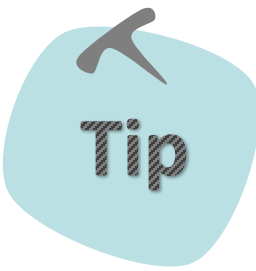
c. Open to interpretation.

Reading of AD 2019-0085 / 2019-0111

Explanation:

- Any method to properly determine Group 1 or Group 2 status of an aeroplane, if acceptable to the State of Registry authority of the aeroplane, is also acceptable for EASA.
- Only if an AD explicitly requires an inspection, EASA can add (e.g.) a Note:
A review of aeroplane delivery- or maintenance records is acceptable in lieu of the required inspection, provided those records can be relied upon for that purpose, and the [P/N, s/n, etc.] can be conclusively determined from that review.
- Since EASA expect operators to know (or be able to verify) which parts are installed, these ADs do not require any physical inspection.
- As the AD prohibits installation, 'full compliance' cannot be claimed.

Comments and Questions



Before sending any ‘continued airworthiness’ question to EASA, please review our [AD Homepage](#) 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 Programming and Continued Airworthiness Information (PCAI) Section at ads@easa.europa.eu.

Thank you for your participation!

For any (further) questions,
please provide these during the Q&A session at the end of the AD Workshop,
or submit these in Slido during the Workshop.

If there is insufficient time during the Q&A for all questions,
EASA will provide a written answer after the AD Workshop.

E-mail ads@easa.europa.eu

easa.europa.eu/connect



Your safety is our mission.

An Agency of the European Union 